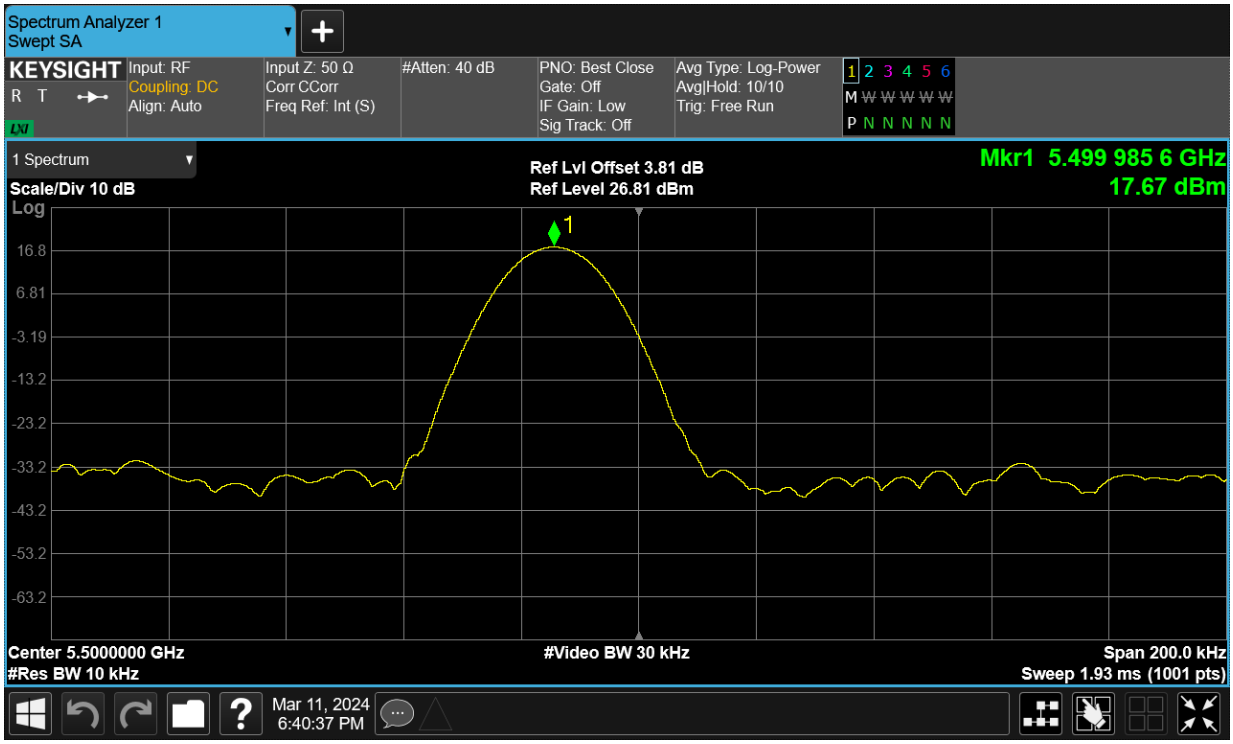
Test Data

Frequency Stability

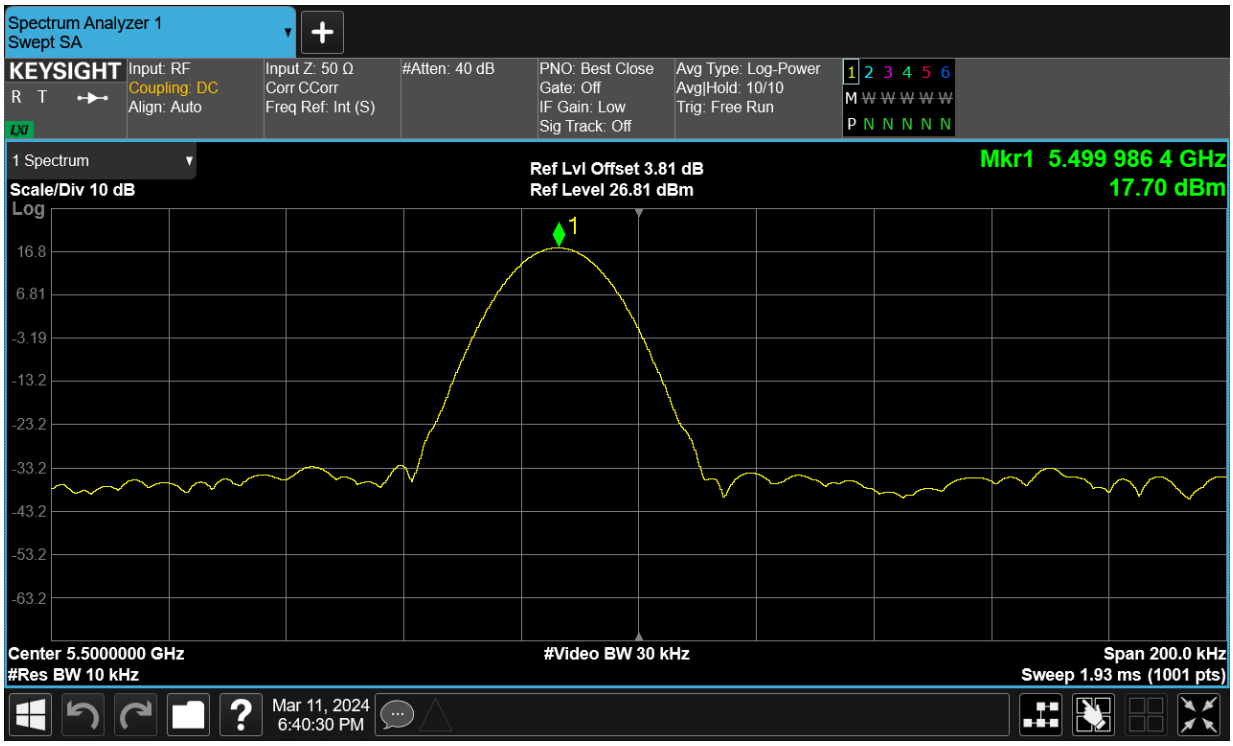
Condition	Mode	Frequency (MHz)	Antenna	Measured Frequency (MHz)	Deviation (ppm)	Limit (ppm)	Verdict
HVNT	a	5500	Ant4	5499.9856	-2.62	Within authorized band	Pass
LVNT	a	5500	Ant4	5499.9864	-2.47		Pass
NVHT	a	5500	Ant4	5499.9864	-2.47		Pass
NVLT	a	5500	Ant4	5499.9868	-2.4		Pass
NVNT	a	5500	Ant4	5499.9882	-2.15		Pass
HVNT	ac80	5530	Ant4	5529.9832	-3.04		Pass
LVNT	ac80	5530	Ant4	5529.9838	-2.93		Pass
NVHT	ac80	5530	Ant4	5529.9846	-2.78		Pass
NVLT	ac80	5530	Ant4	5529.9848	-2.75		Pass
NVNT	ac80	5530	Ant4	5529.9852	-2.68		Pass
HVNT	n40	5510	Ant4	5509.9866	-2.43		Pass
LVNT	n40	5510	Ant4	5509.9866	-2.43		Pass
NVHT	n40	5510	Ant4	5509.9878	-2.21		Pass
NVLT	n40	5510	Ant4	5509.9888	-2.03		Pass
NVNT	n40	5510	Ant4	5509.9912	-1.6		Pass
Remark: “NTNV” means Normal Temperature Normal Voltage, “NVHT” means Normal Voltage High Temperature, “NVLT” means Normal Voltage Low Temperature, “LVNT” means Low Voltage Normal Temperature, “HVNT” means High Voltage Normal Temperature.							

Test Graphs

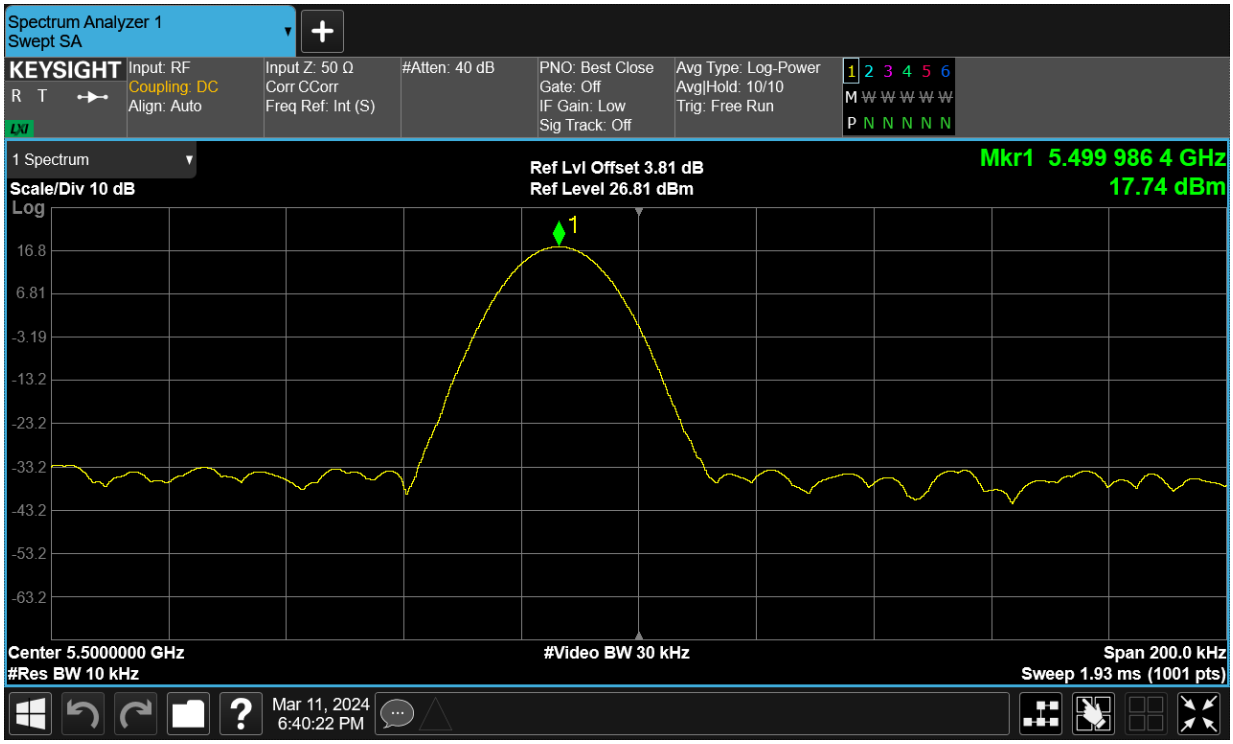
Freq. Stability HVNT a 5500MHz Ant4



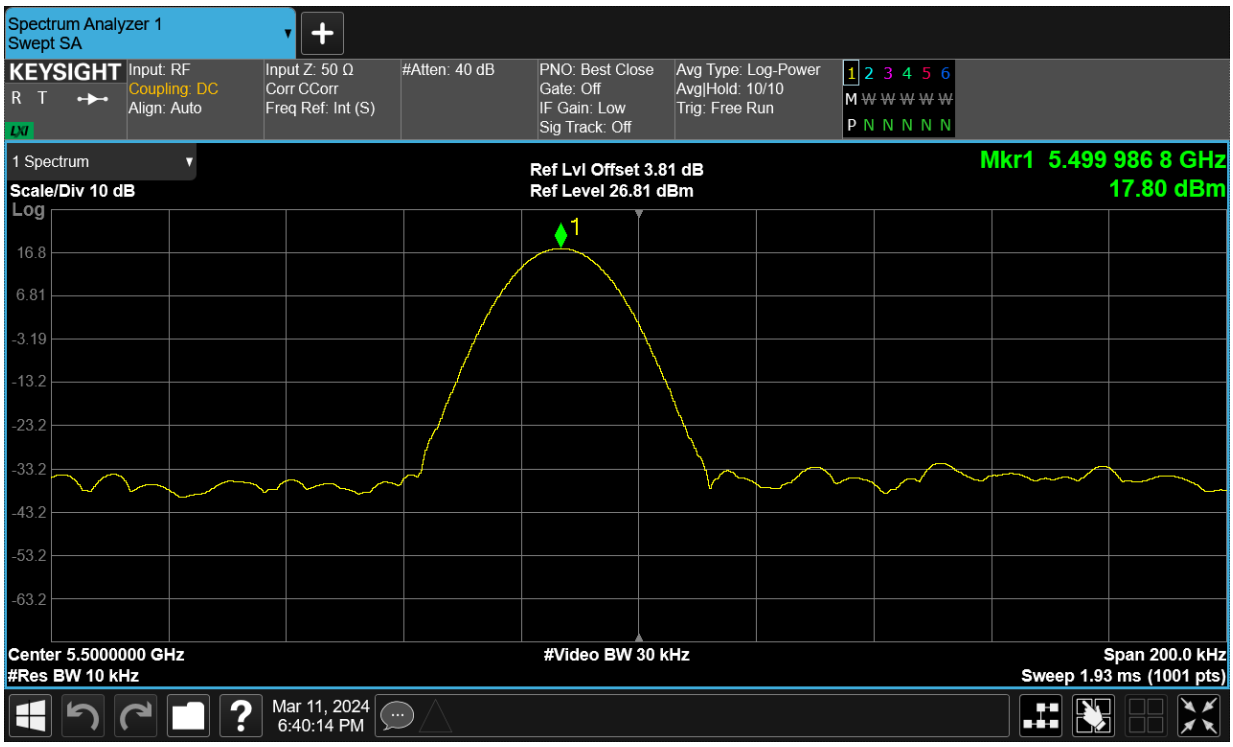
Freq. Stability LVNT a 5500MHz Ant4



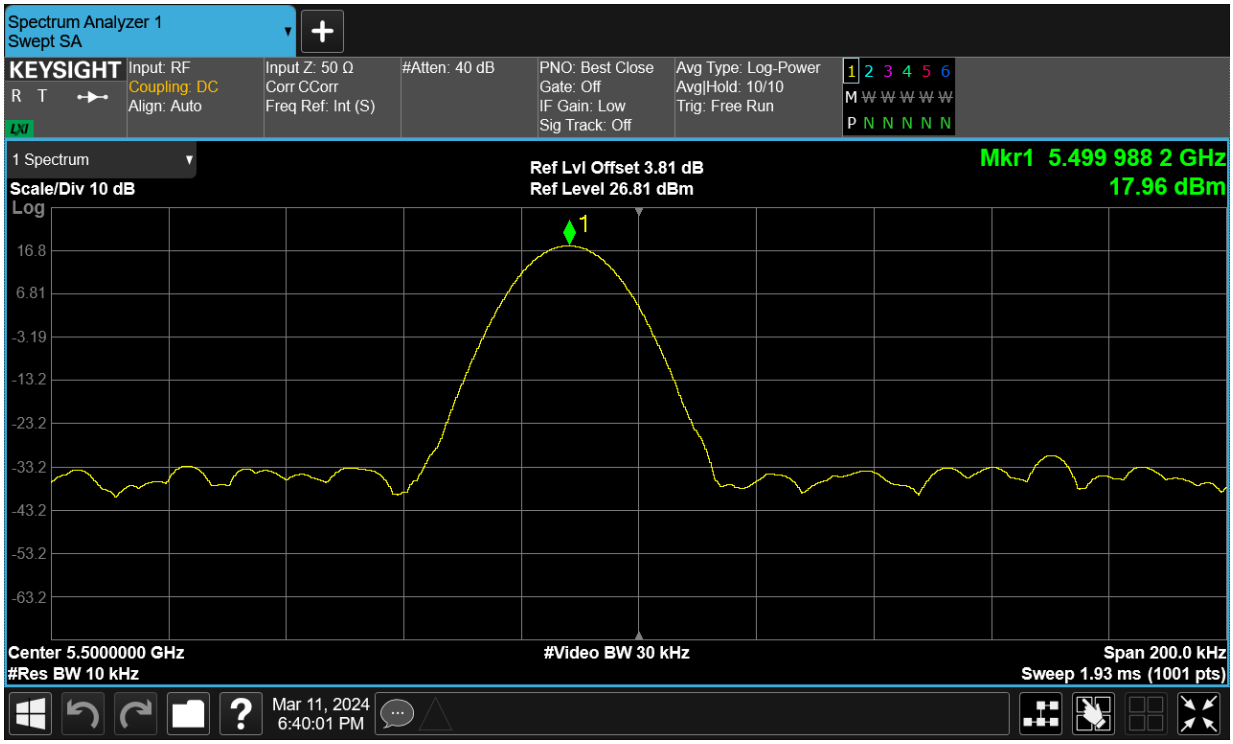
Freq. Stability NVHT a 5500MHz Ant4



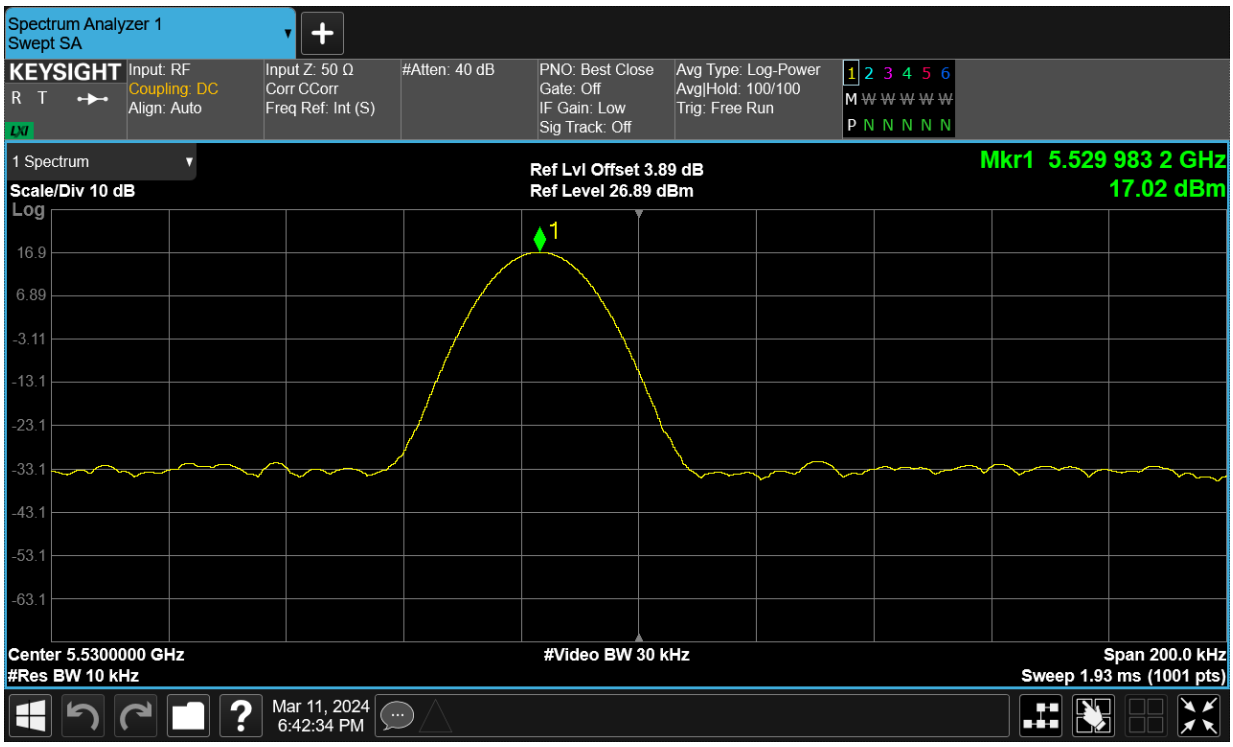
Freq. Stability NVLT a 5500MHz Ant4



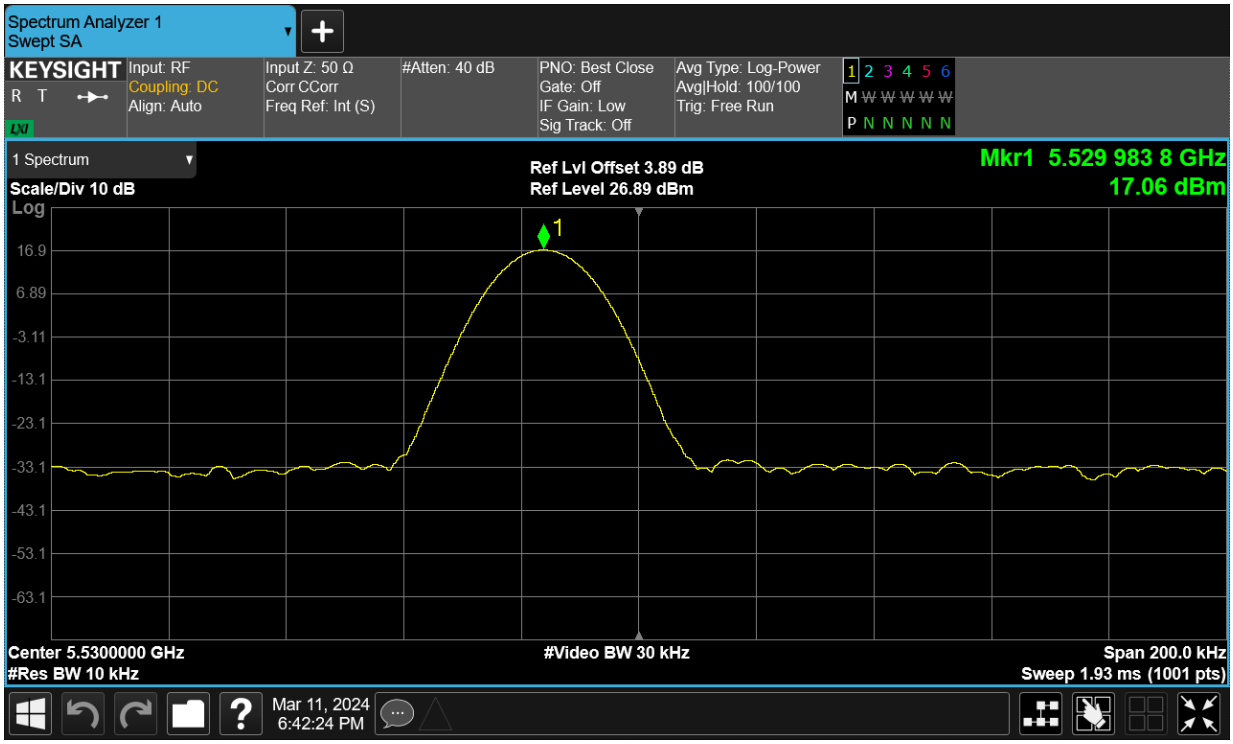
Freq. Stability NVNT a 5500MHz Ant4



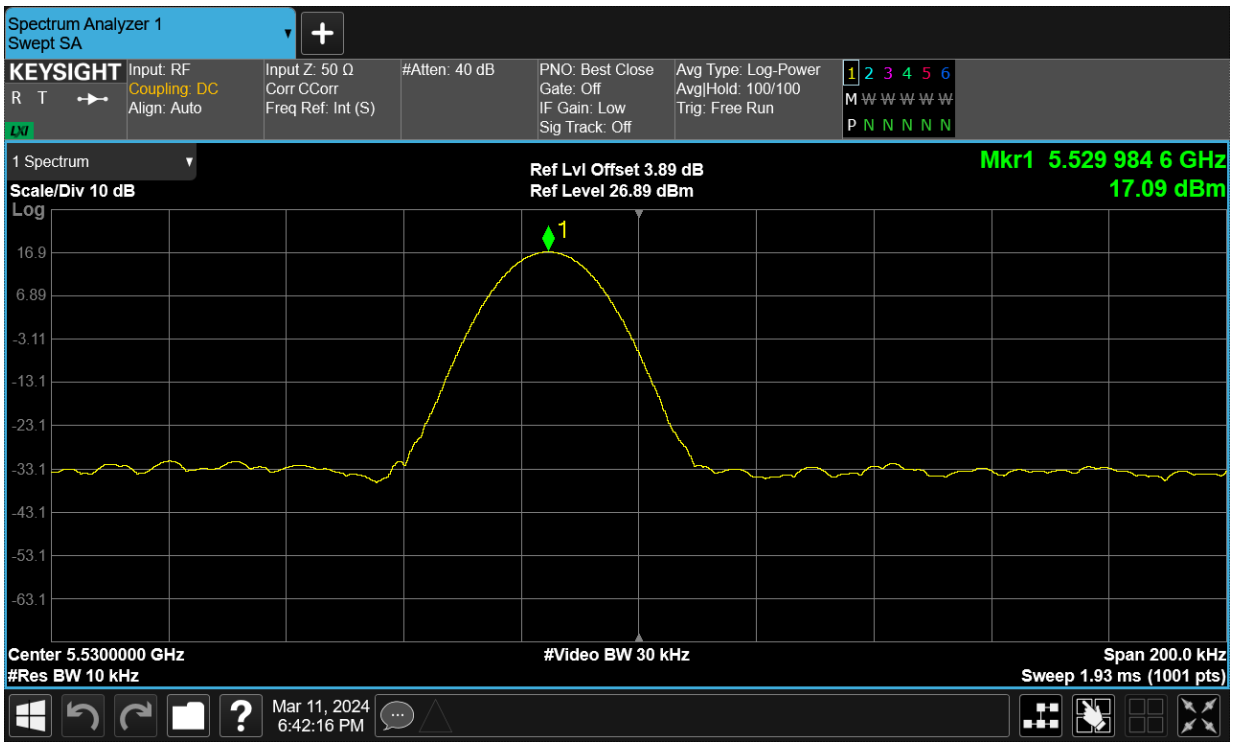
Freq. Stability HVNT ac80 5530MHz Ant4



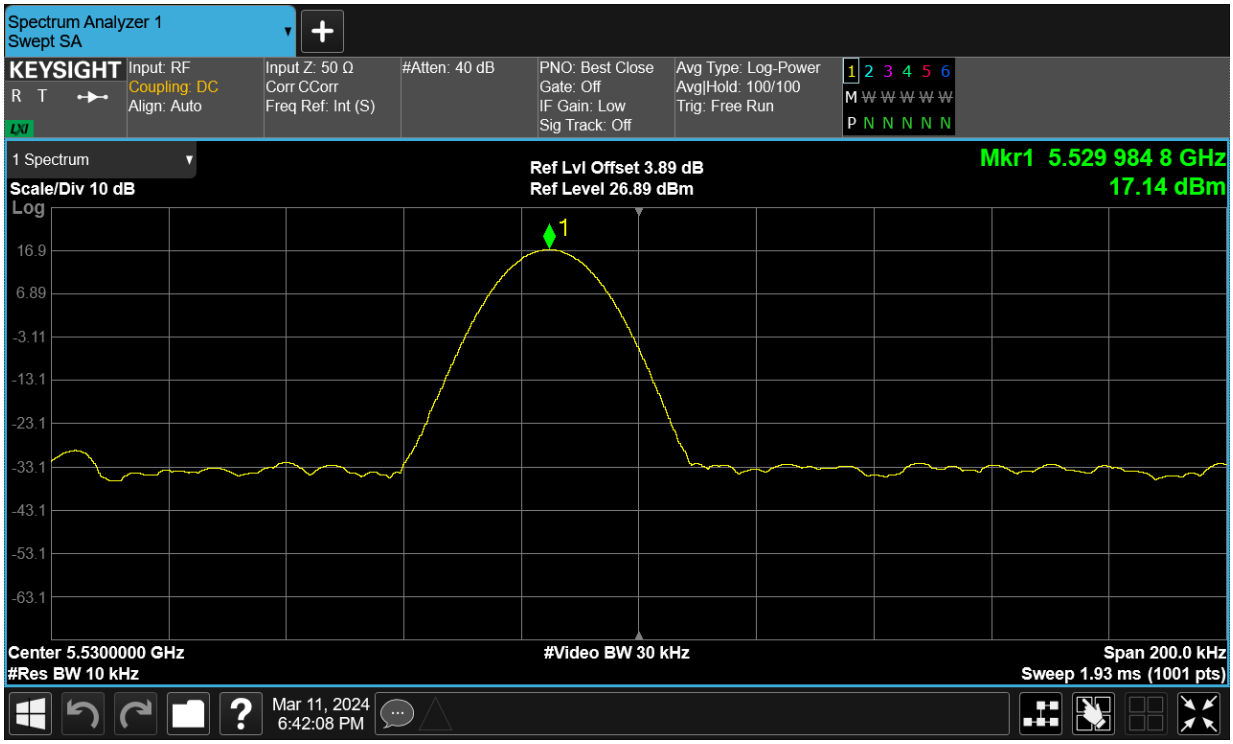
Freq. Stability LVNT ac80 5530MHz Ant4



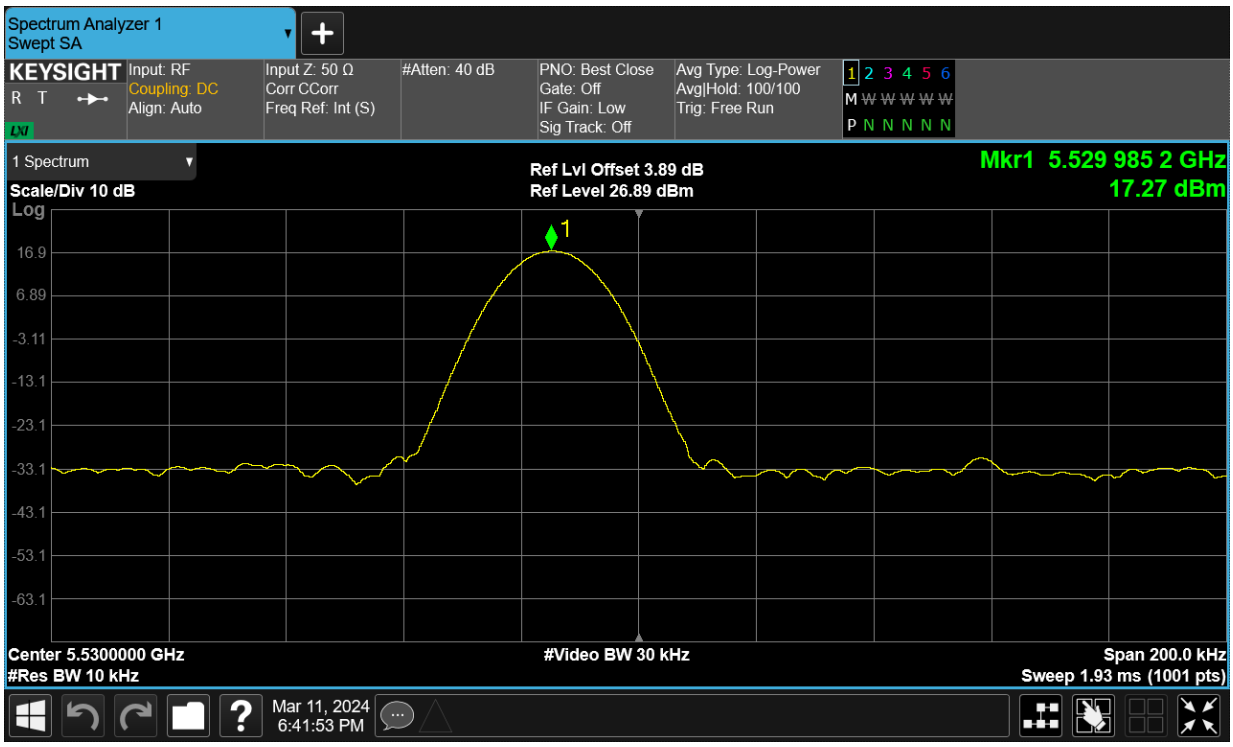
Freq. Stability NVHT ac80 5530MHz Ant4



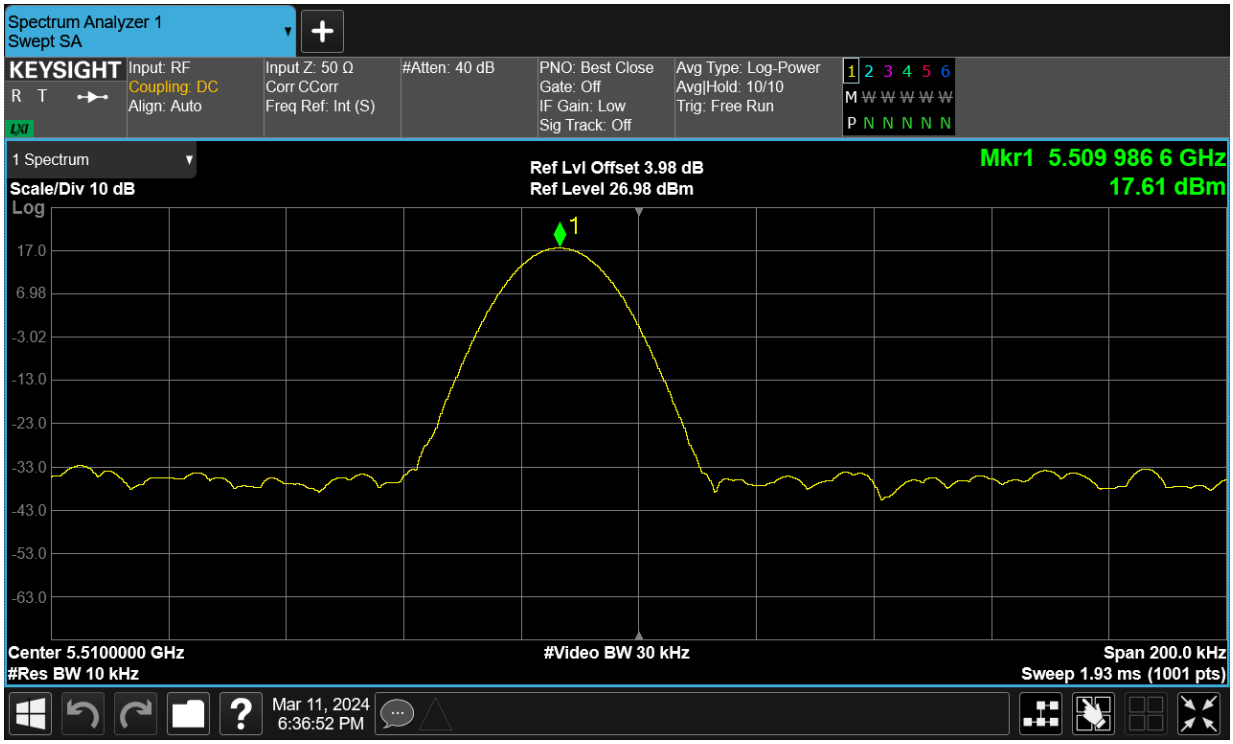
Freq. Stability NVLT ac80 5530MHz Ant4



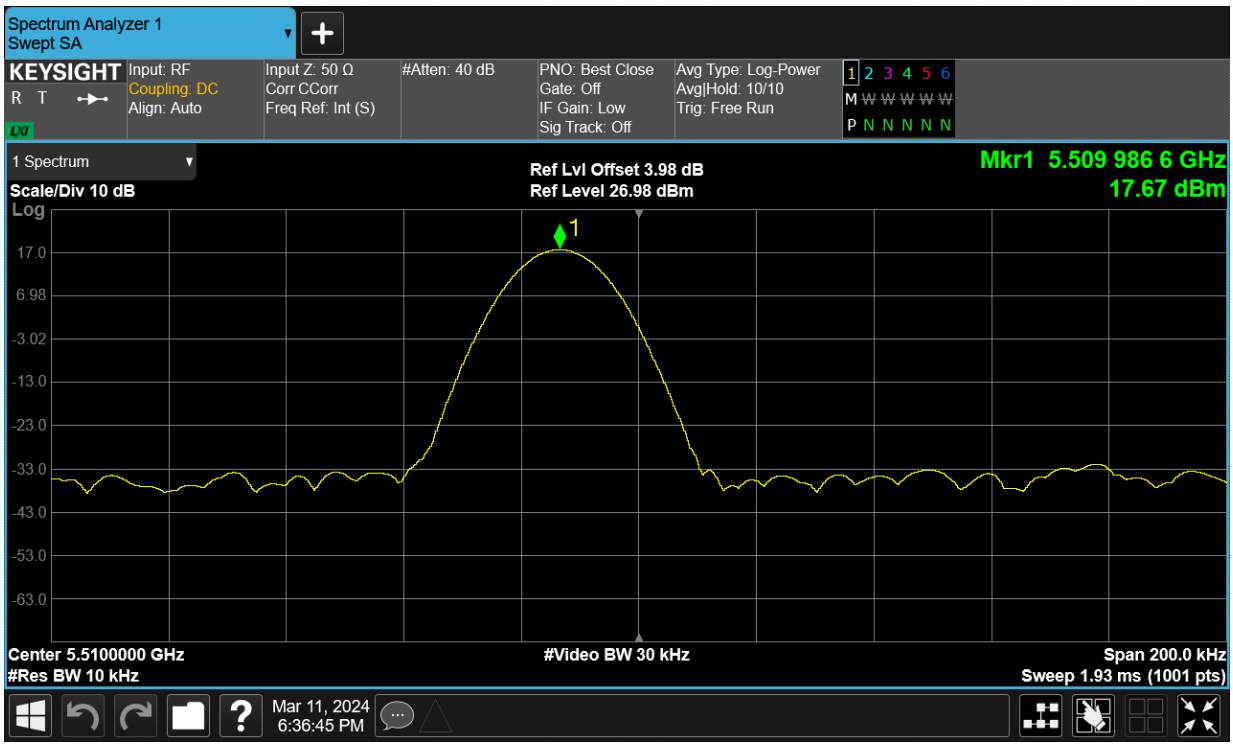
Freq. Stability NVNT ac80 5530MHz Ant4



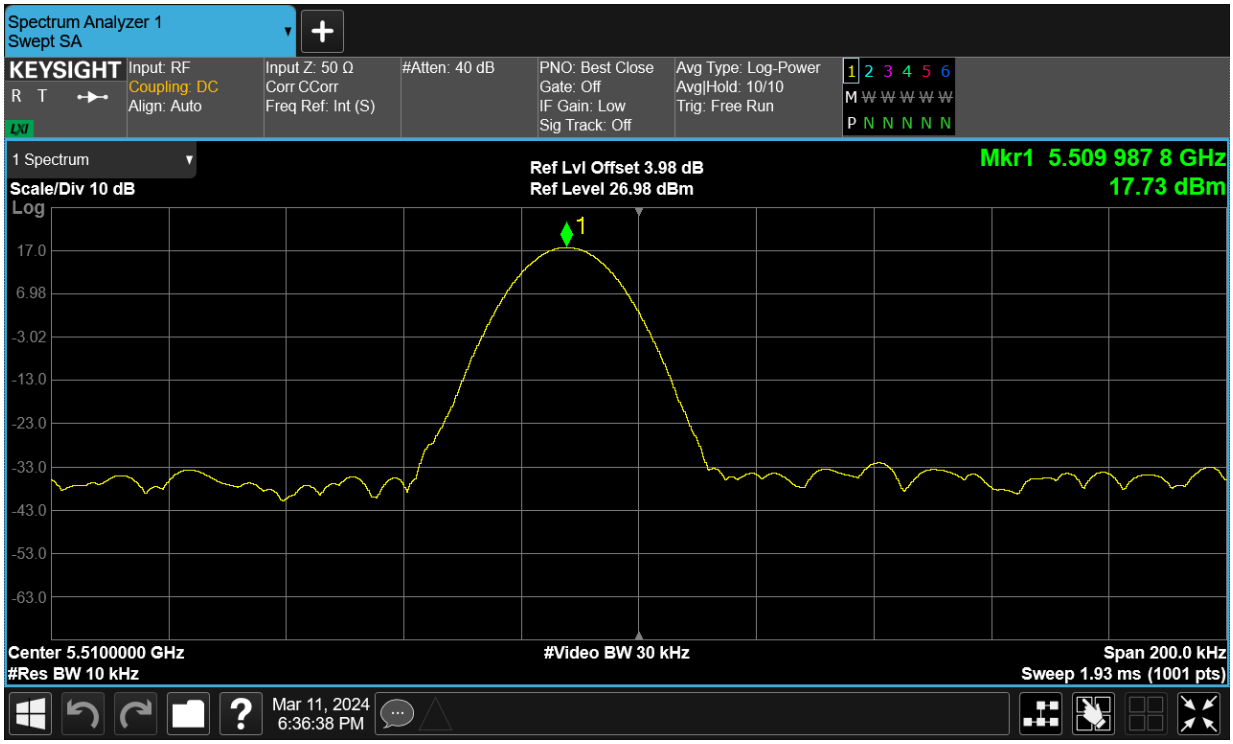
Freq. Stability HVNT n40 5510MHz Ant4



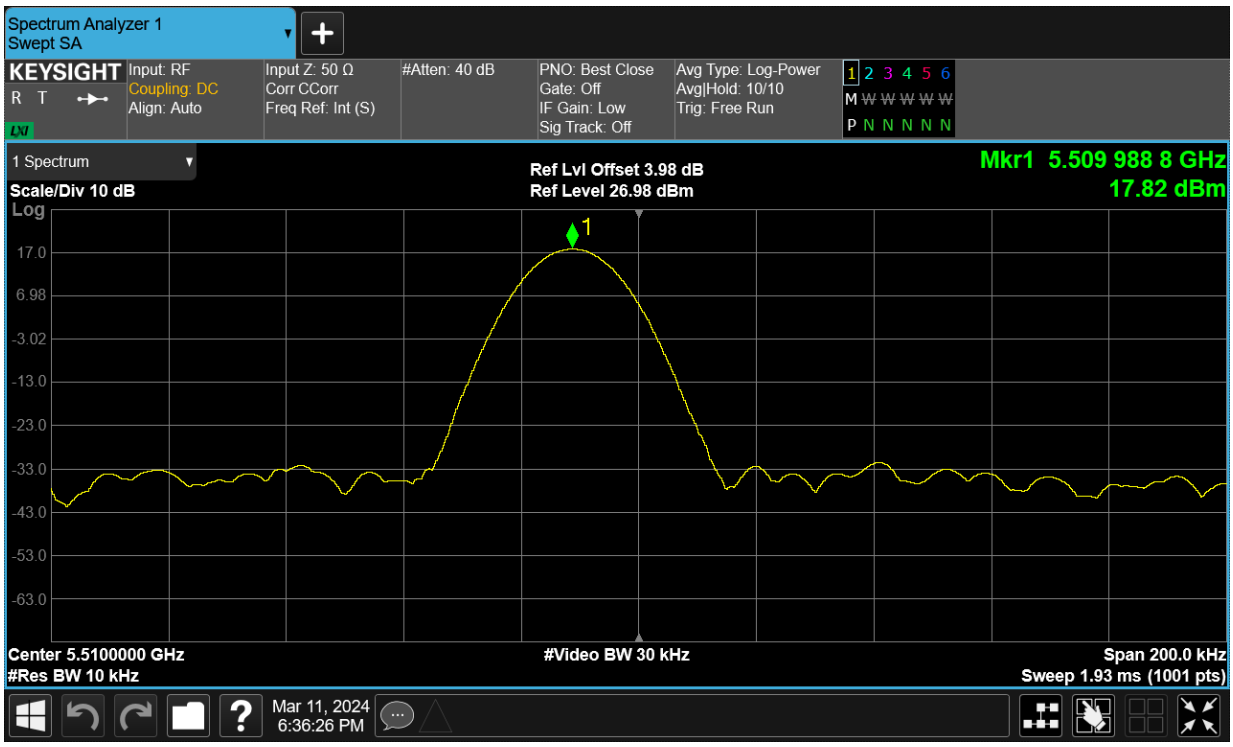
Freq. Stability LVNT n40 5510MHz Ant4



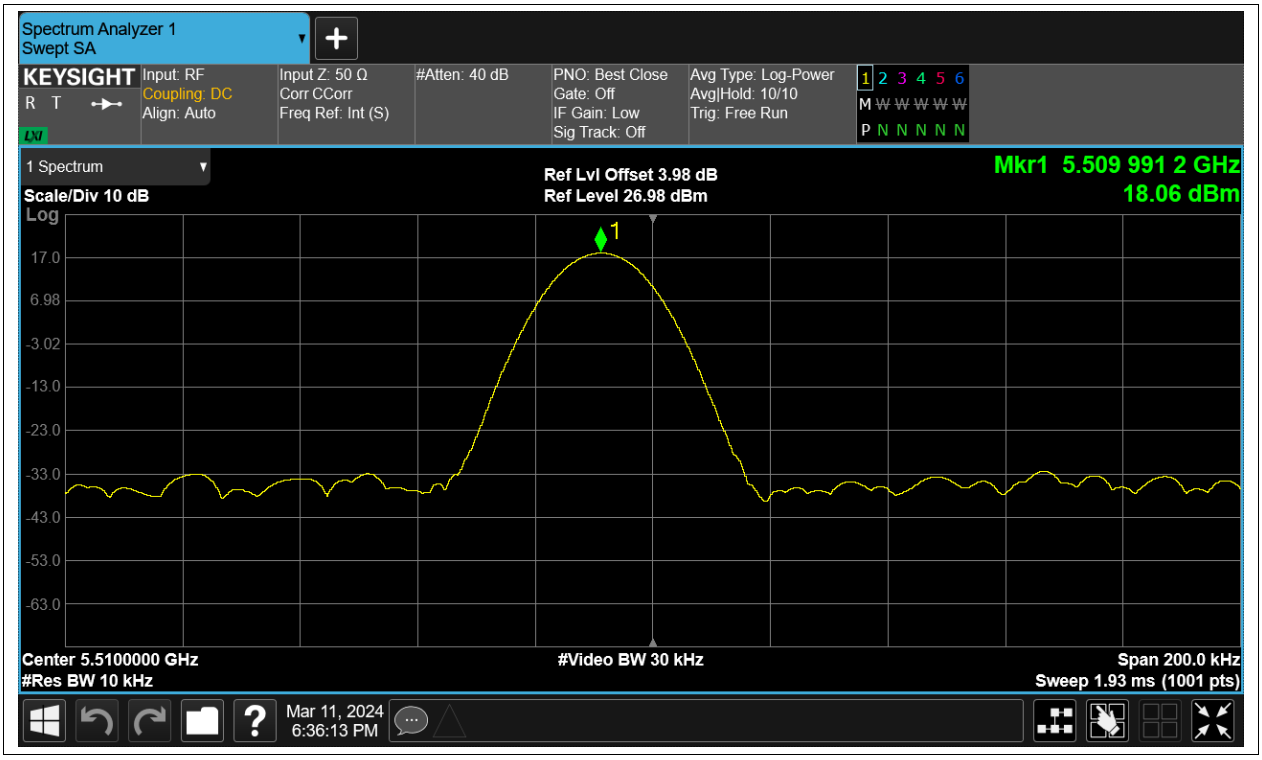
Freq. Stability NVHT n40 5510MHz Ant4



Freq. Stability NVLT n40 5510MHz Ant4



Freq. Stability NVNT n40 5510MHz Ant4

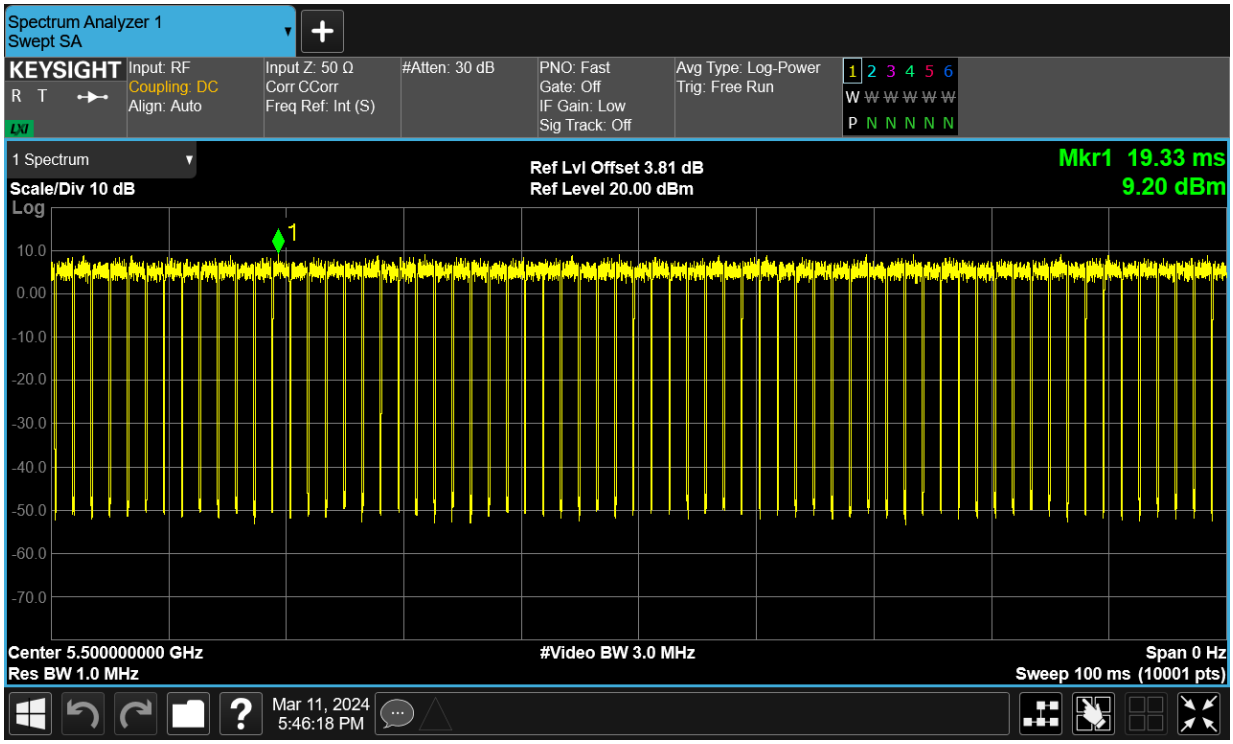

Spectrum Analyzer 1
Swept SA
KEYSIGHT
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corr CCorr
Freq Ref: Int (S)
#Atten: 40 dB
PNO: Best Close
Gate: Off
IF Gain: Low
Sig Track: Off
Avg Type: Log-Power
Avg|Hold: 10/10
Trig: Free Run
1 Spectrum
Scale/Div 10 dB
Log
Ref Lvl Offset 3.98 dB
Ref Level 26.98 dBm
Mkr1 5.509 991 2 GHz
18.06 dBm
17.0
6.98
-3.02
-13.0
-23.0
-33.0
-43.0
-53.0
-63.0
Center 5.5100000 GHz
#Res BW 10 kHz
#Video BW 30 kHz
Span 200.0 kHz
Sweep 1.93 ms (1001 pts)
Mar 11, 2024
6:36:13 PM

Duty Cycle

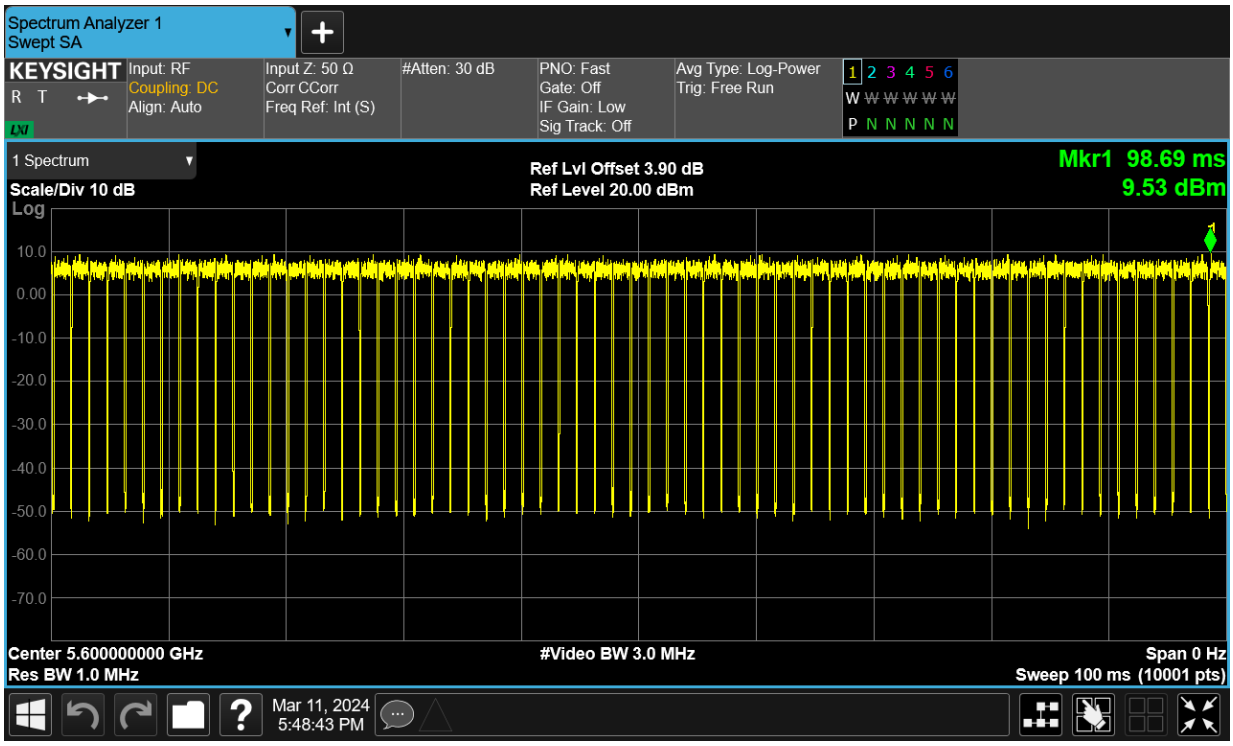
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)
NVNT	a	5500	Ant4	91.3	0.4
NVNT	a	5600	Ant4	91.31	0.39
NVNT	a	5700	Ant4	91.3	0.4
NVNT	ac20	5500	Ant4	89.72	0.47
NVNT	ac20	5600	Ant4	89.73	0.47
NVNT	ac20	5700	Ant4	89.75	0.47
NVNT	ac40	5510	Ant4	81.26	0.9
NVNT	ac40	5590	Ant4	81.29	0.9
NVNT	ac40	5670	Ant4	81.45	0.89
NVNT	ac80	5530	Ant4	69.71	1.57
NVNT	ac80	5610	Ant4	69.77	1.56
NVNT	n20	5500	Ant4	89.69	0.47
NVNT	n20	5600	Ant4	89.83	0.47
NVNT	n20	5700	Ant4	89.56	0.48
NVNT	n40	5510	Ant4	81.88	0.87
NVNT	n40	5590	Ant4	81.5	0.89
NVNT	n40	5670	Ant4	81.71	0.88

Test Graphs

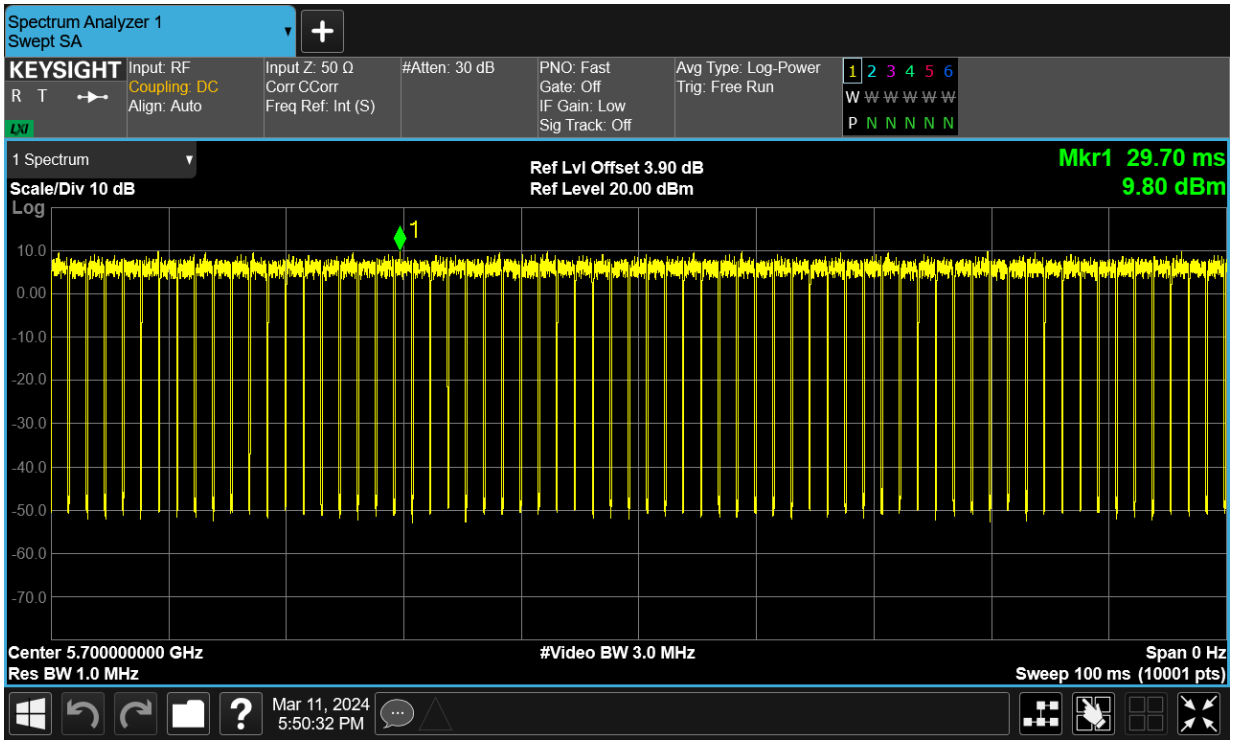
Duty Cycle NVNT a 5500MHz Ant4



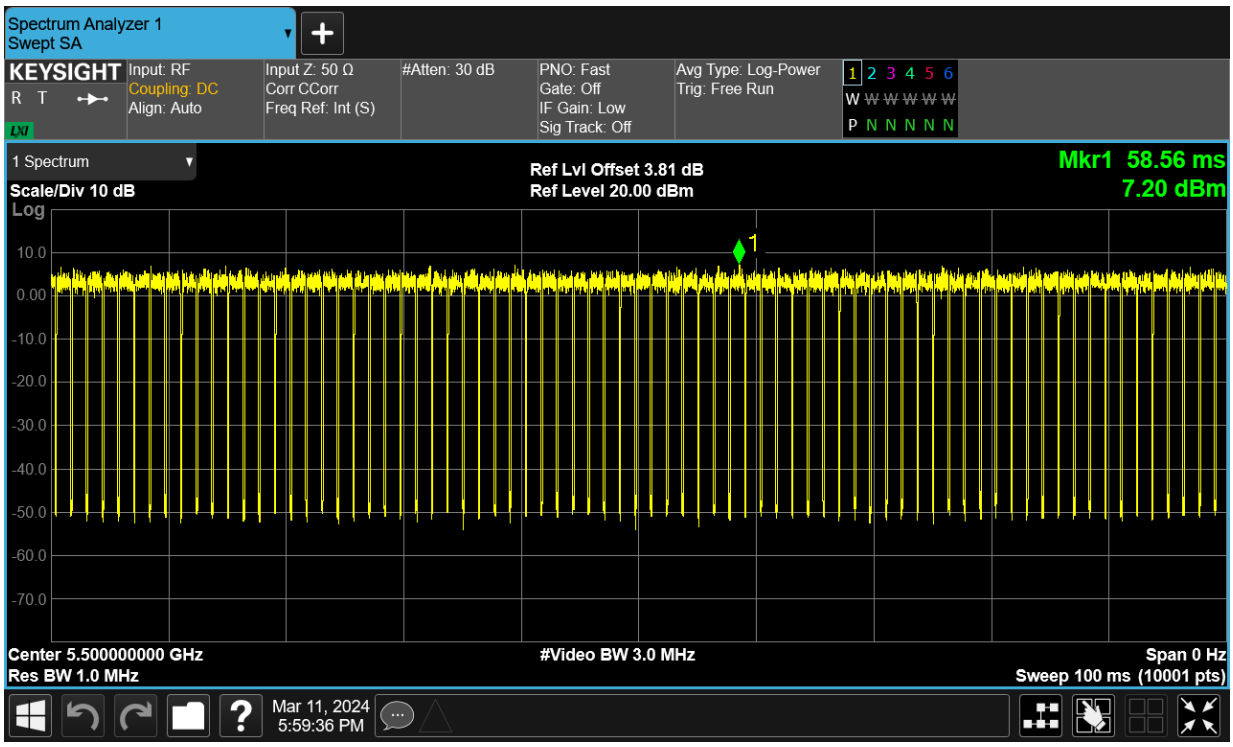
Duty Cycle NVNT a 5600MHz Ant4



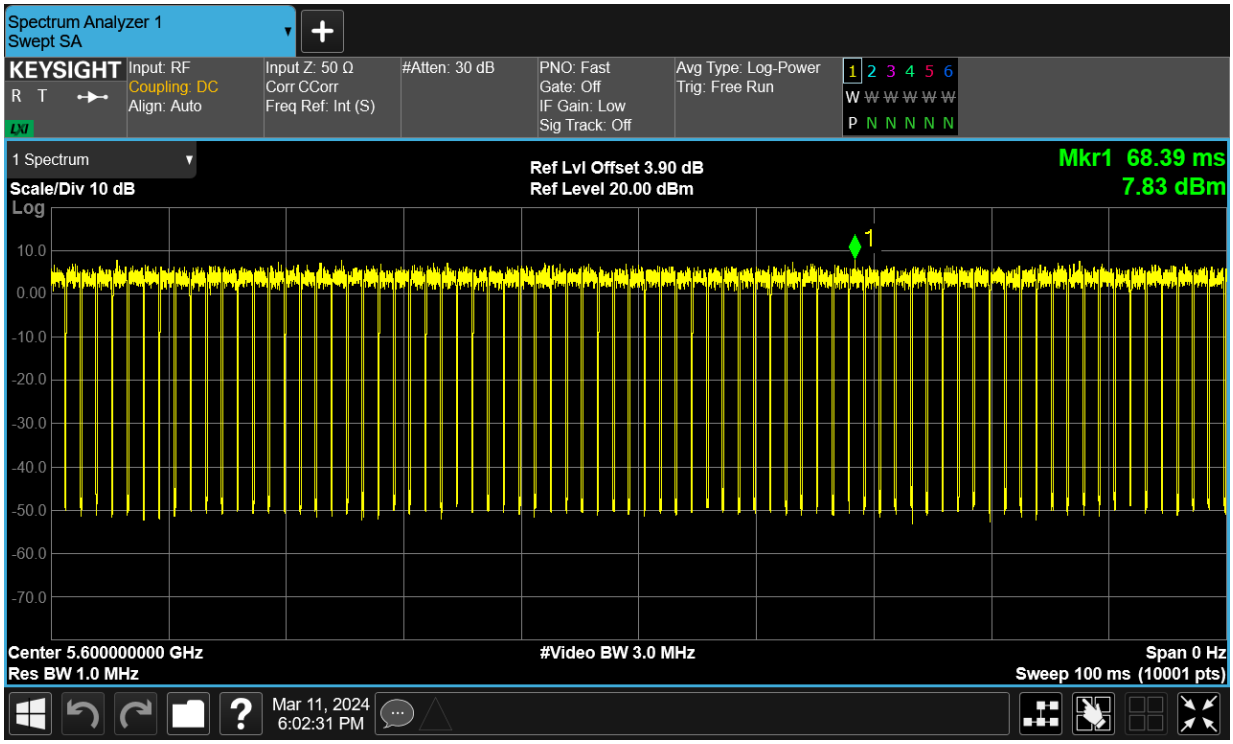
Duty Cycle NVNT a 5700MHz Ant4



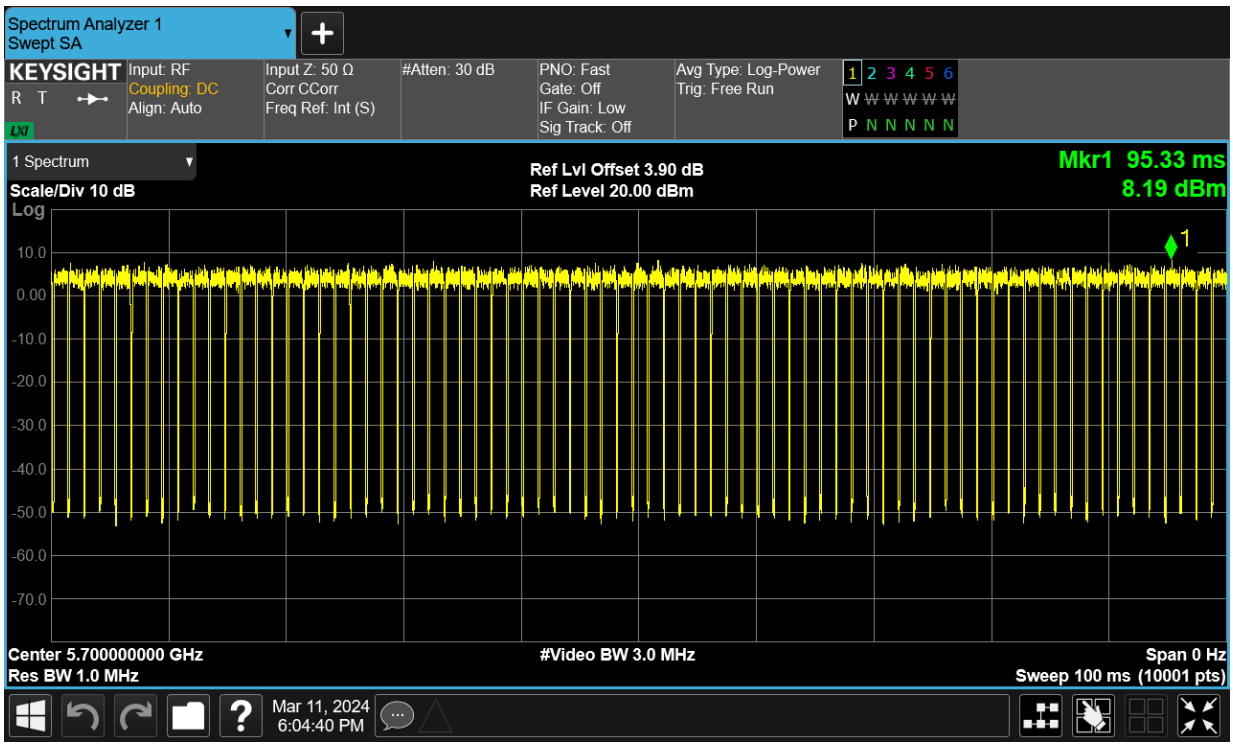
Duty Cycle NVNT ac20 5500MHz Ant4



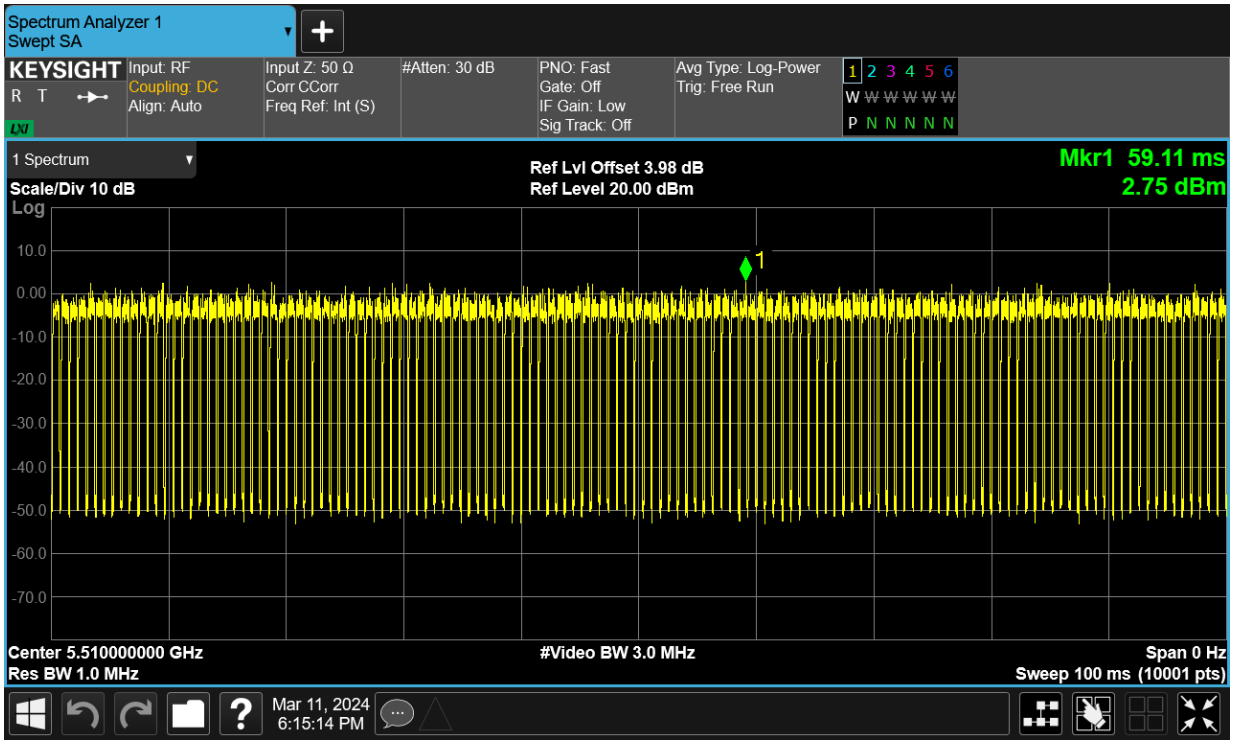
Duty Cycle NVNT ac20 5600MHz Ant4



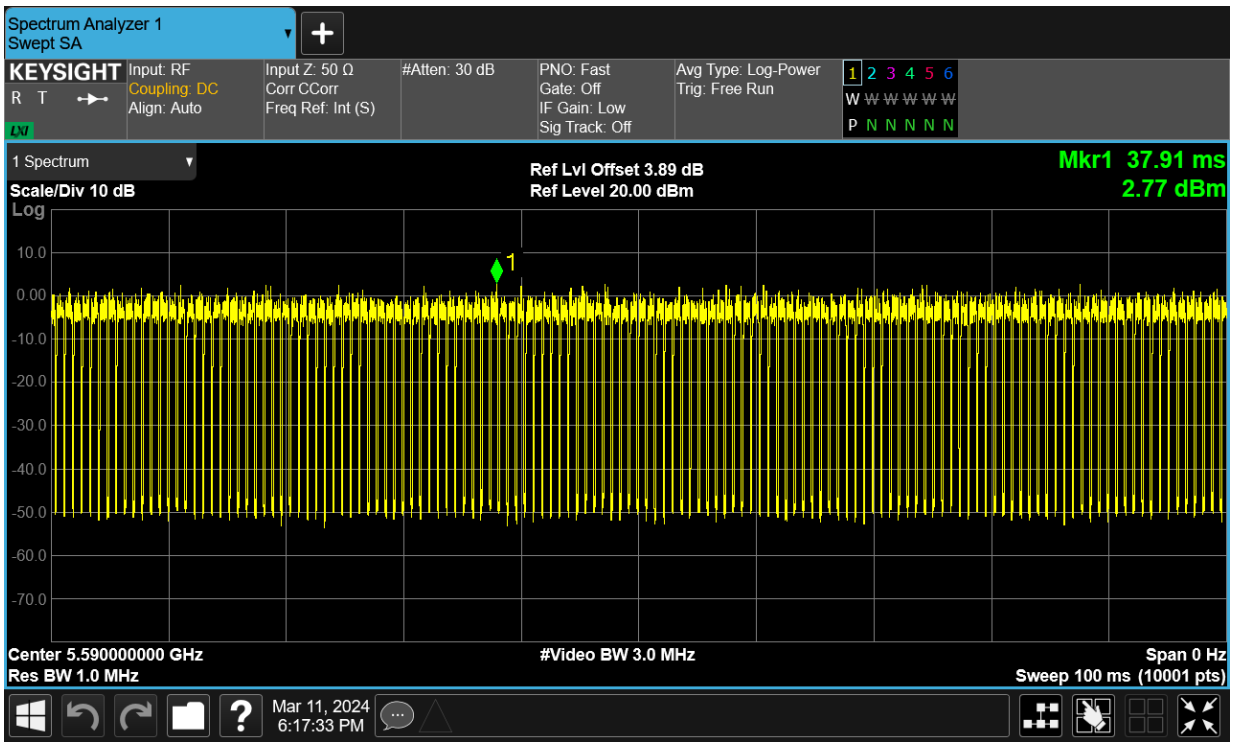
Duty Cycle NVNT ac20 5700MHz Ant4



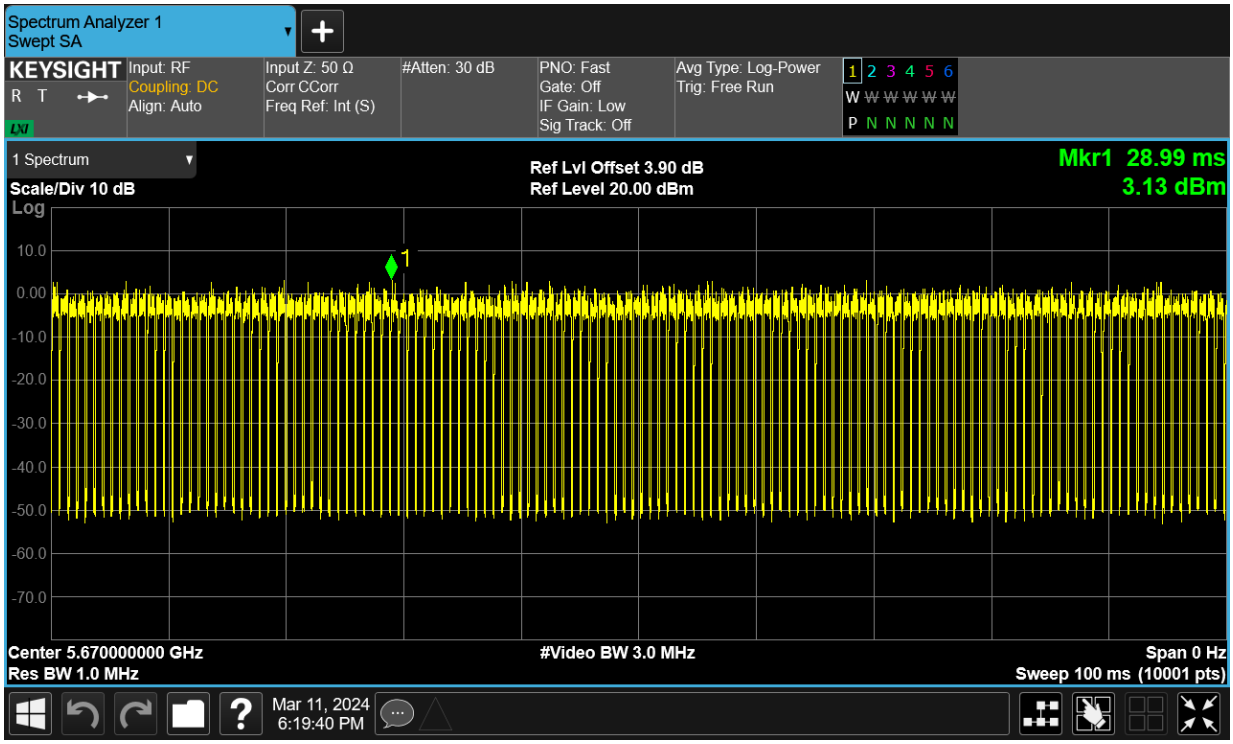
Duty Cycle NVNT ac40 5510MHz Ant4



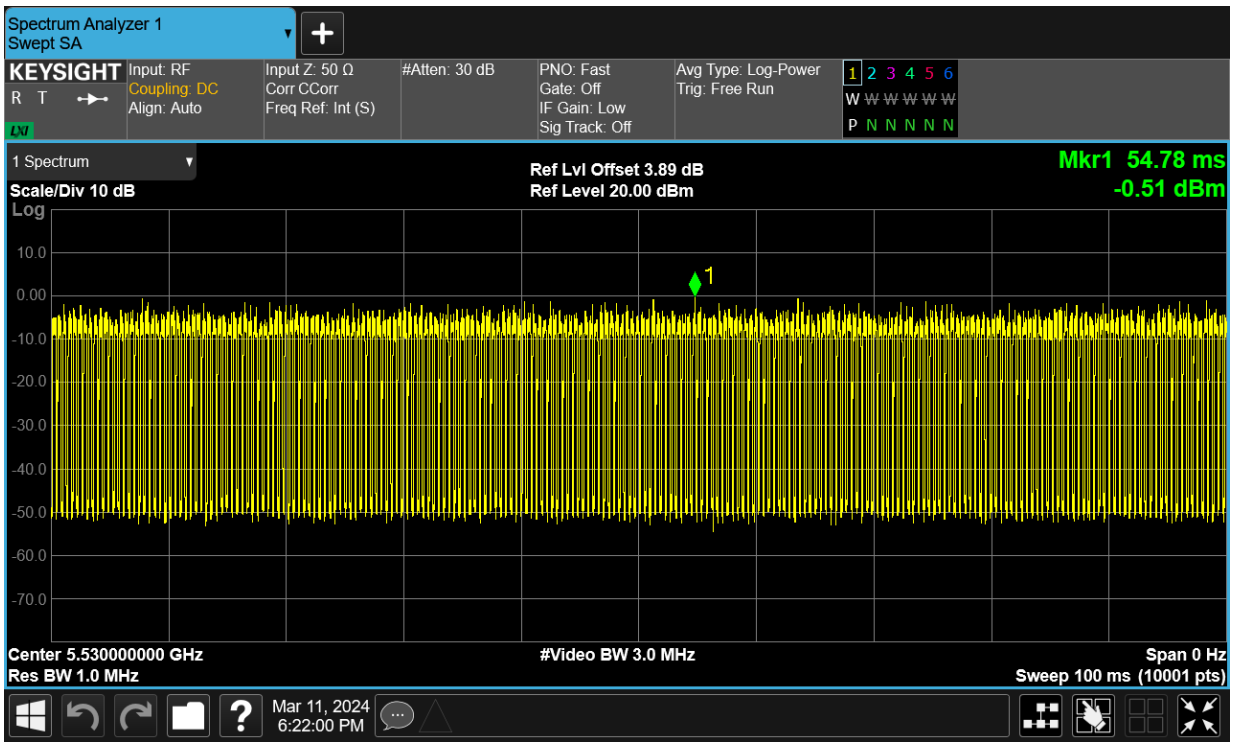
Duty Cycle NVNT ac40 5590MHz Ant4



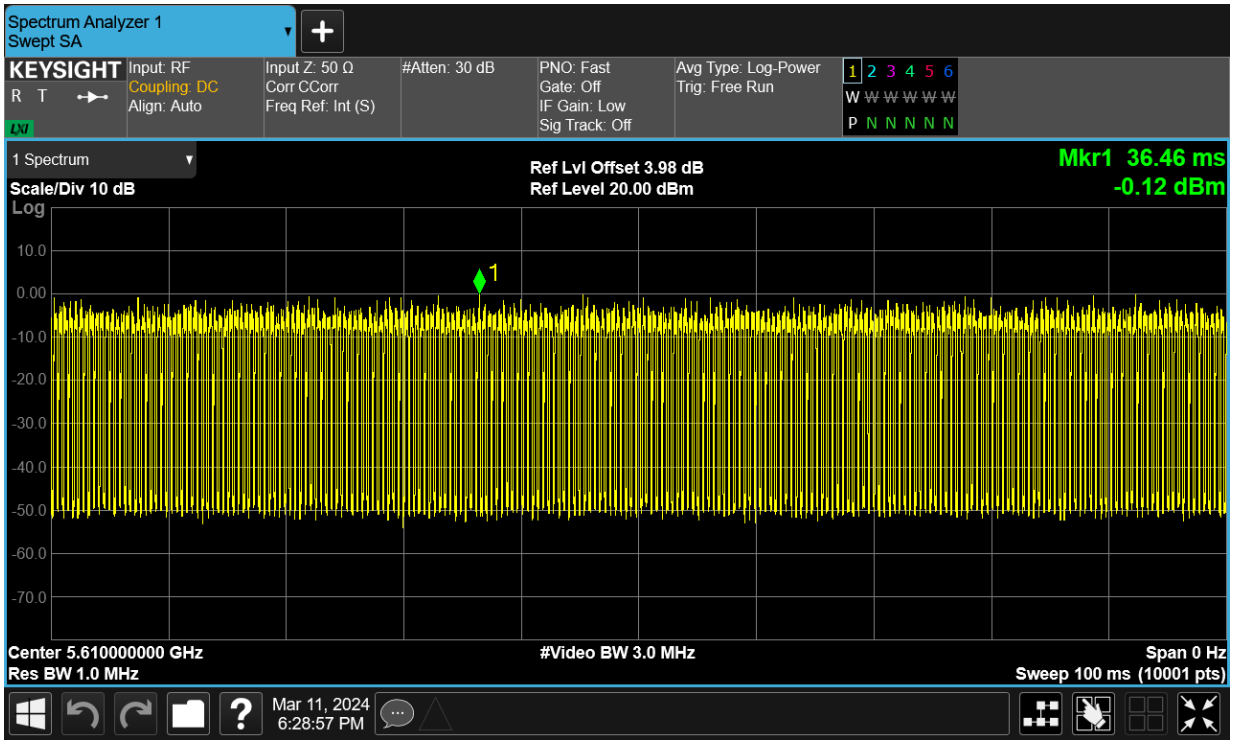
Duty Cycle NVNT ac40 5670MHz Ant4



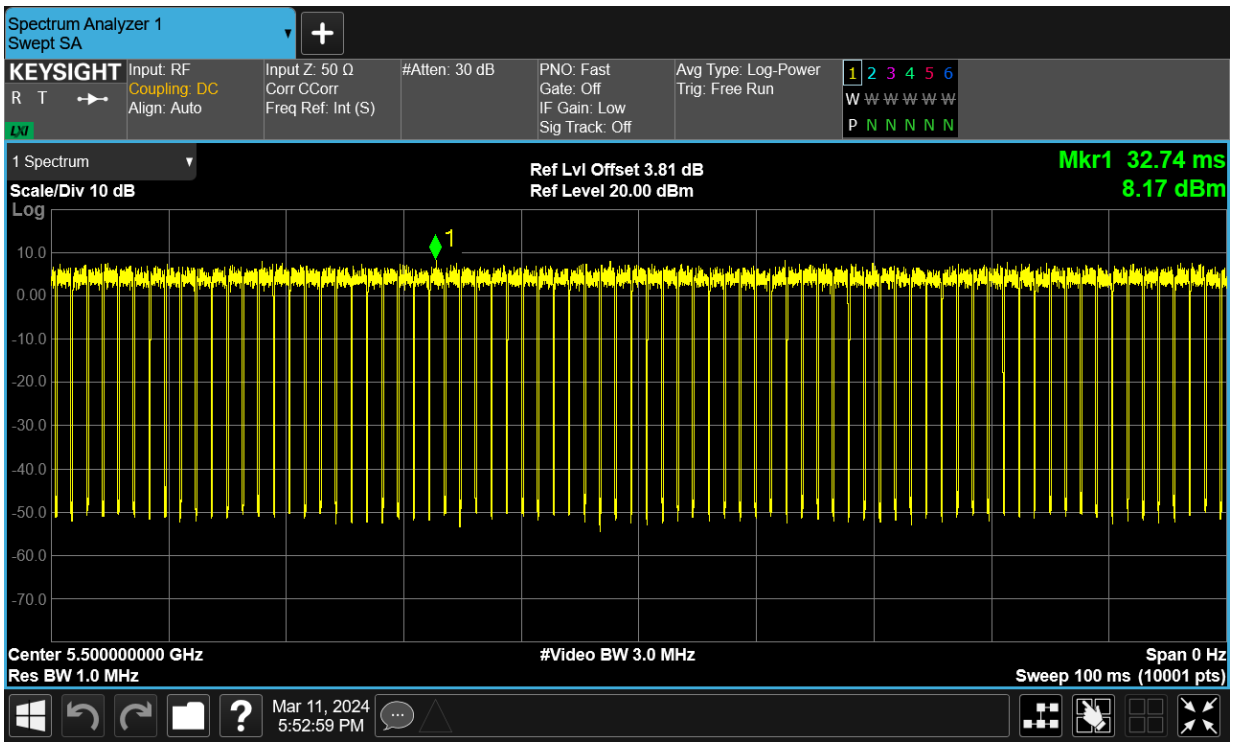
Duty Cycle NVNT ac80 5530MHz Ant4



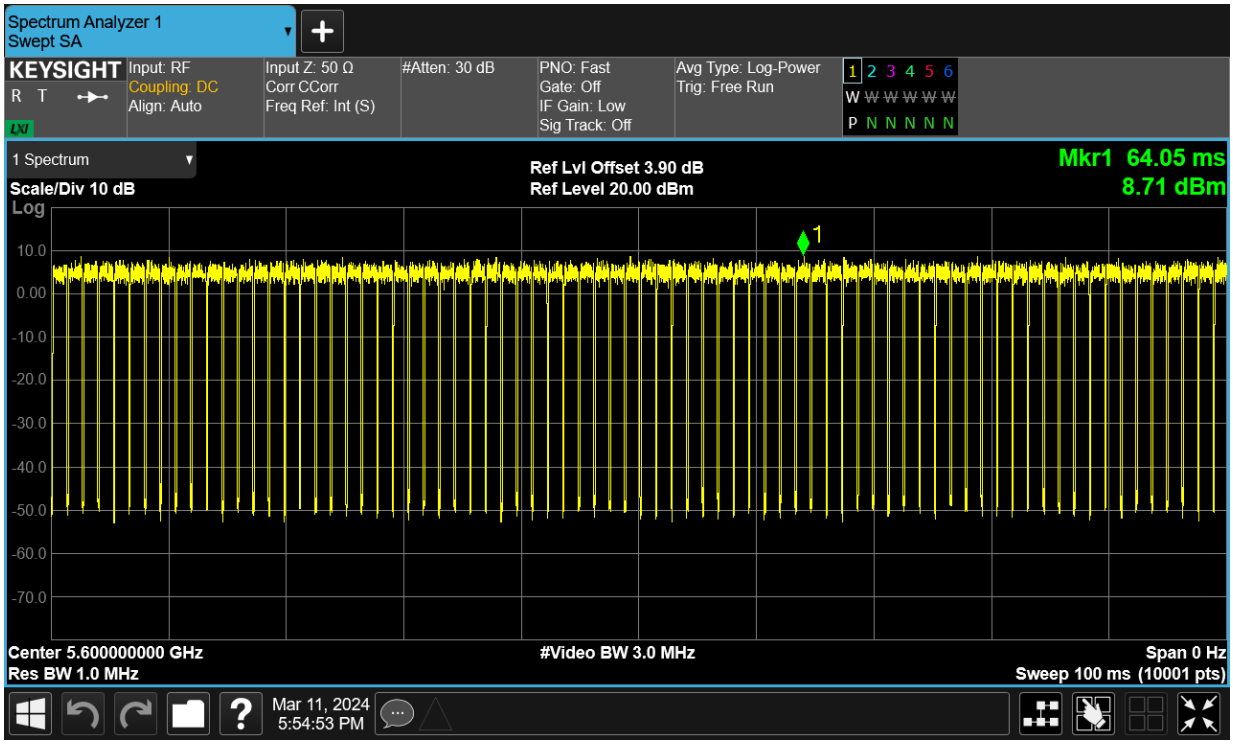
Duty Cycle NVNT ac80 5610MHz Ant4



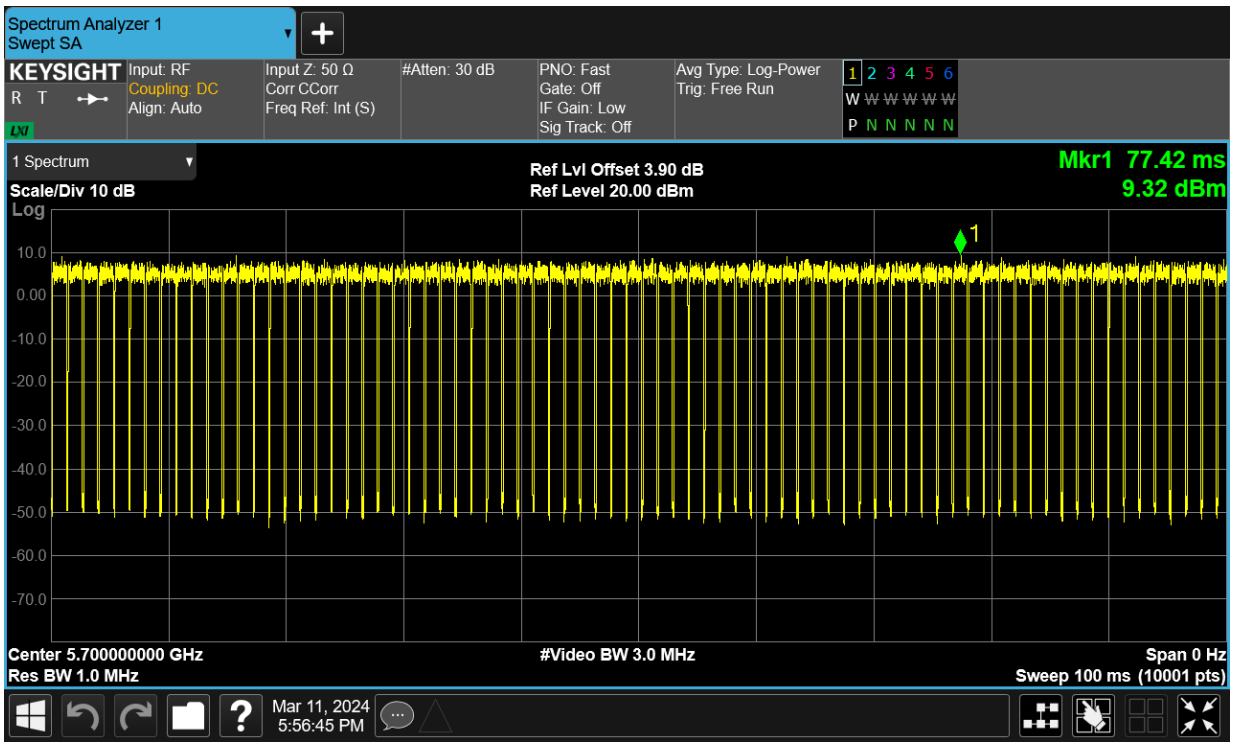
Duty Cycle NVNT n20 5500MHz Ant4



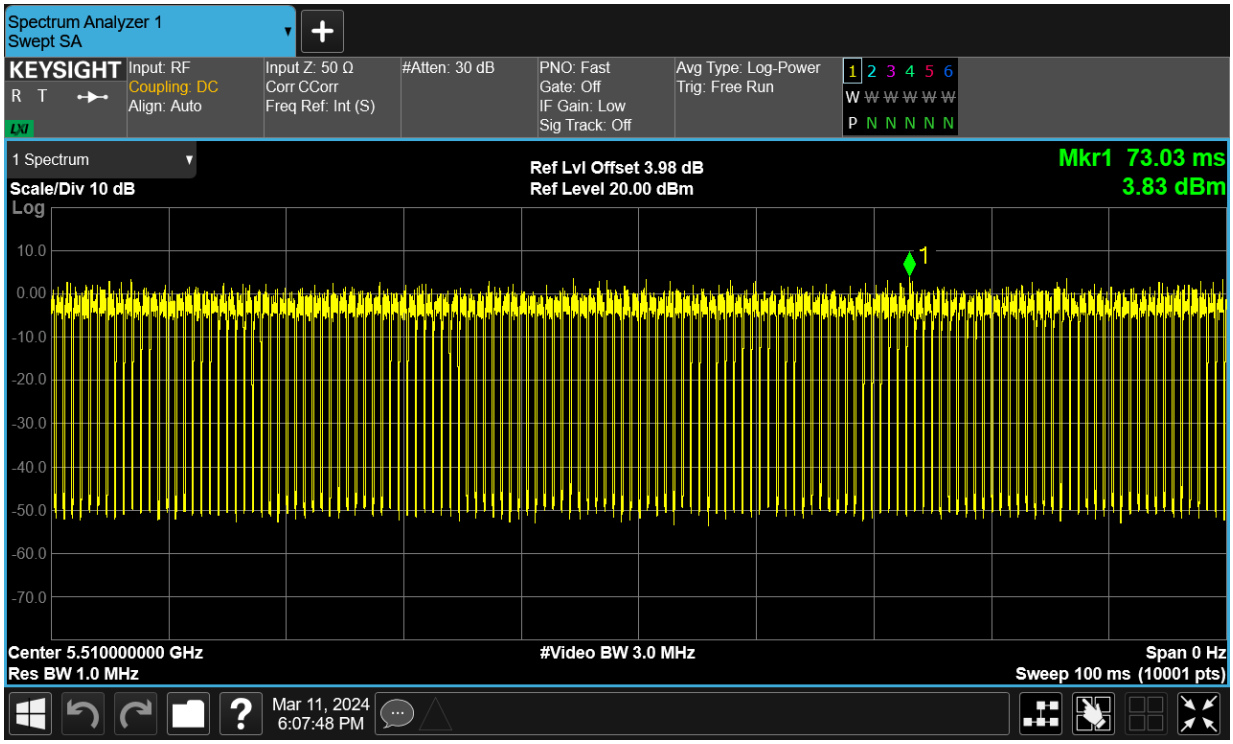
Duty Cycle NVNT n20 5600MHz Ant4



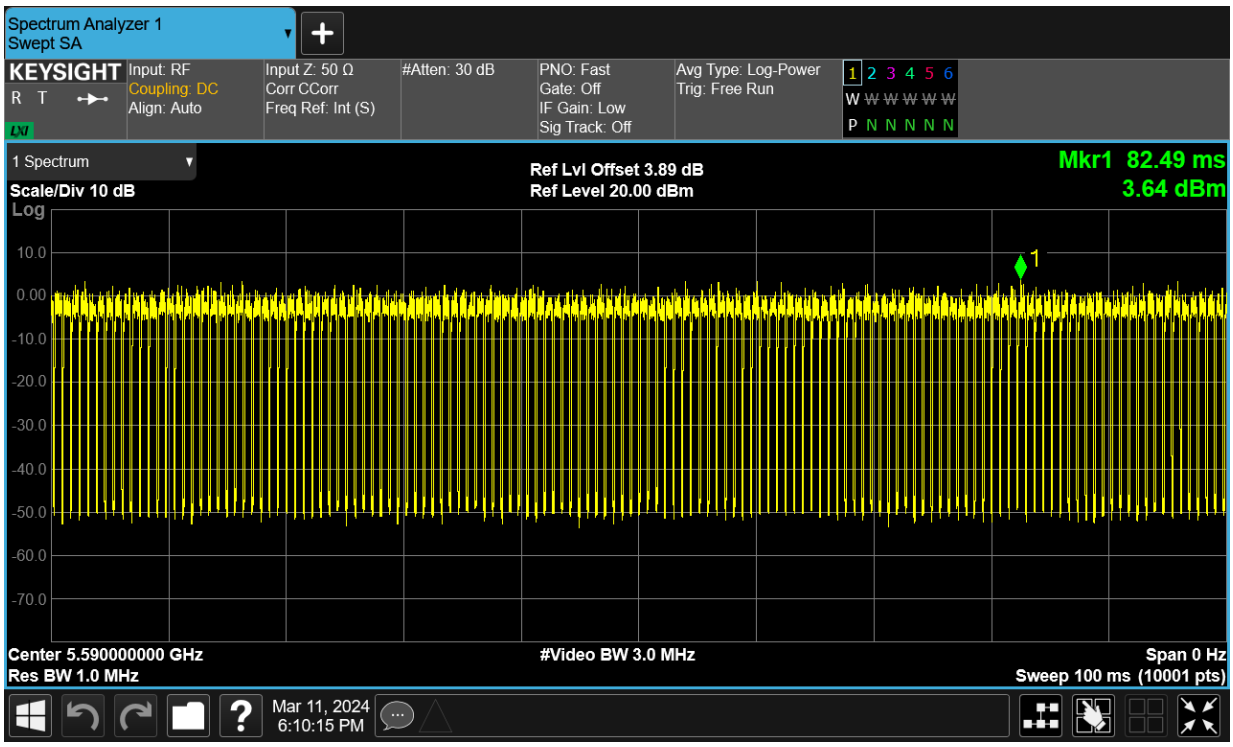
Duty Cycle NVNT n20 5700MHz Ant4



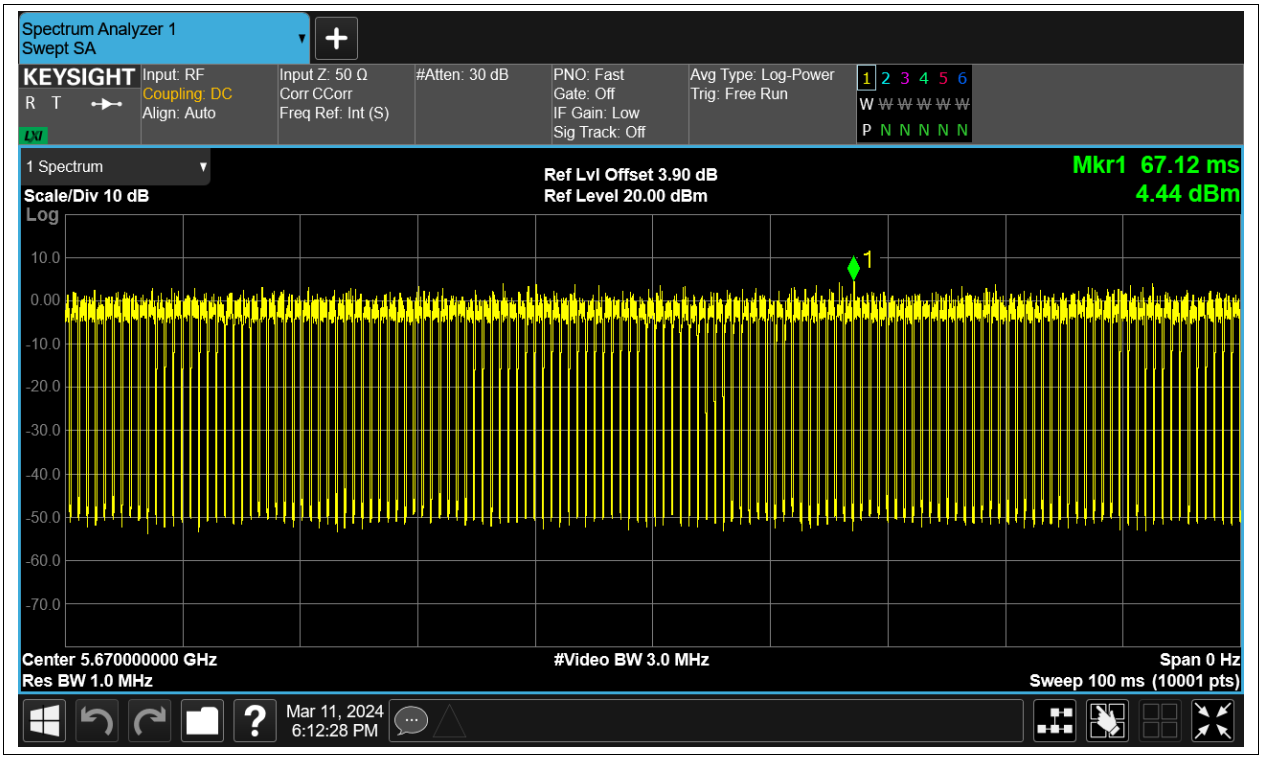
Duty Cycle NVNT n40 5510MHz Ant4



Duty Cycle NVNT n40 5590MHz Ant4



Duty Cycle NVNT n40 5670MHz Ant4


Spectrum Analyzer 1
Swept SA
KEYSIGHT
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corr CCorr
Freq Ref: Int (S)
#Atten: 30 dB
PNO: Fast
Gate: Off
IF Gain: Low
Sig Track: Off
Avg Type: Log-Power
Trig: Free Run
1 Spectrum
Scale/Div 10 dB
Log
Ref Lvl Offset 3.90 dB
Ref Level 20.00 dBm
Mkr1 67.12 ms
4.44 dBm
Center 5.670000000 GHz
Res BW 1.0 MHz
#Video BW 3.0 MHz
Span 0 Hz
Sweep 100 ms (10001 pts)
Mar 11, 2024
6:12:28 PM

Maximum Conducted Output Power

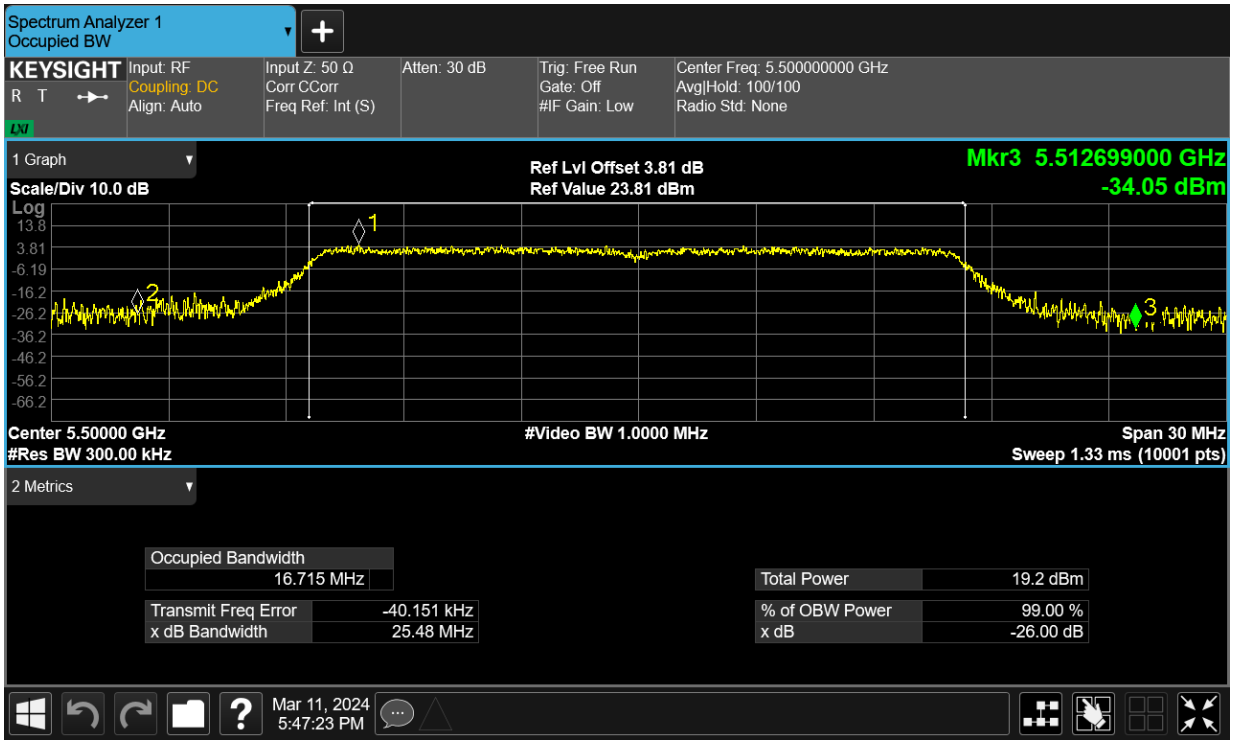
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5500	Ant4	13.8	0.4	14.2	24	Pass
NVNT	a	5600	Ant4	14.48	0.39	14.87	24	Pass
NVNT	a	5700	Ant4	14.42	0.4	14.82	24	Pass
NVNT	ac20	5500	Ant4	12.03	0.47	12.5	24	Pass
NVNT	ac20	5600	Ant4	12.65	0.47	13.12	24	Pass
NVNT	ac20	5700	Ant4	12.64	0.47	13.11	24	Pass
NVNT	ac40	5510	Ant4	12.24	0.9	13.14	24	Pass
NVNT	ac40	5590	Ant4	12.46	0.9	13.36	24	Pass
NVNT	ac40	5670	Ant4	12.48	0.89	13.37	24	Pass
NVNT	ac80	5530	Ant4	12.15	1.57	13.72	24	Pass
NVNT	ac80	5610	Ant4	11.8	1.56	13.36	24	Pass
NVNT	n20	5500	Ant4	12.96	0.47	13.43	24	Pass
NVNT	n20	5600	Ant4	13.69	0.47	14.16	24	Pass
NVNT	n20	5700	Ant4	13.59	0.48	14.07	24	Pass
NVNT	n40	5510	Ant4	13.14	0.87	14.01	24	Pass
NVNT	n40	5590	Ant4	13.24	0.89	14.13	24	Pass
NVNT	n40	5670	Ant4	13.3	0.88	14.18	24	Pass

-26dB Bandwidth

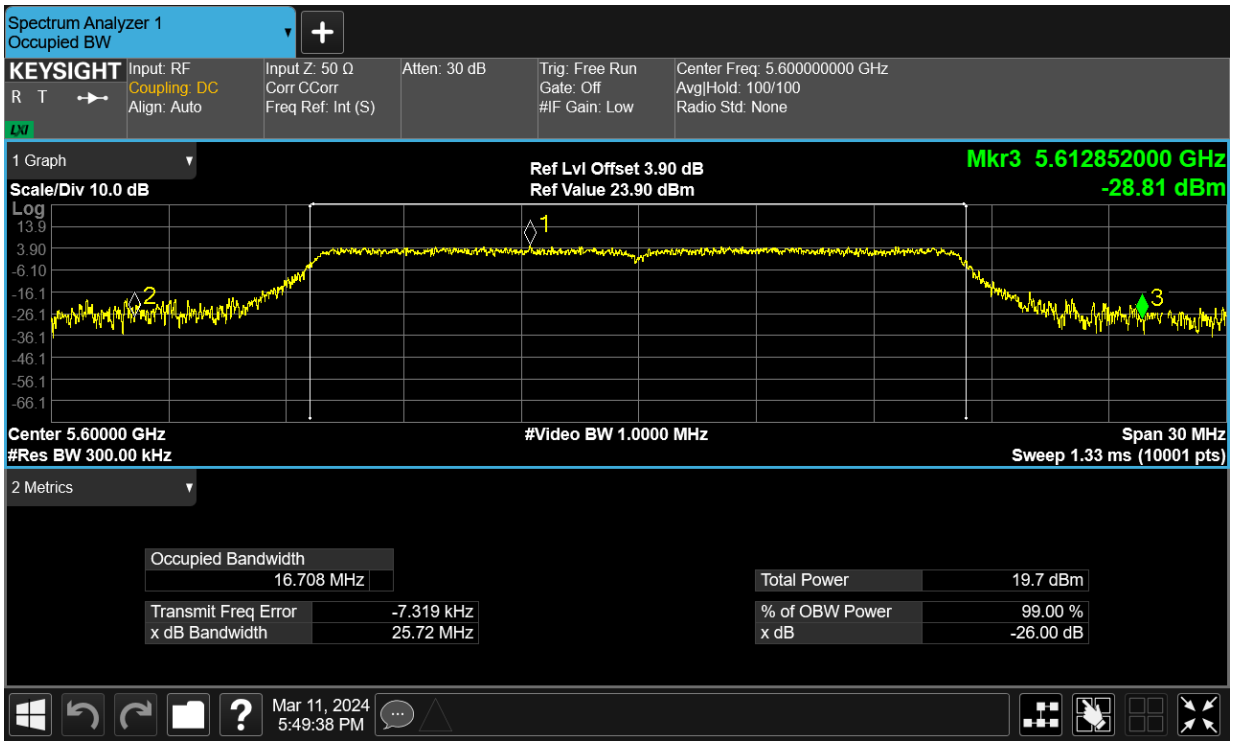
Condition	Mode	Frequency (MHz)	Antenna	-26 dB Bandwidth (MHz)
NVNT	a	5500	Ant4	25.478
NVNT	a	5600	Ant4	25.719
NVNT	a	5700	Ant4	28.793
NVNT	ac20	5500	Ant4	27.197
NVNT	ac20	5600	Ant4	27.291
NVNT	ac20	5700	Ant4	26.478
NVNT	ac40	5510	Ant4	53.697
NVNT	ac40	5590	Ant4	54.059
NVNT	ac40	5670	Ant4	54.037
NVNT	ac80	5530	Ant4	80.824
NVNT	ac80	5610	Ant4	78.164
NVNT	n20	5500	Ant4	28.979
NVNT	n20	5600	Ant4	28.607
NVNT	n20	5700	Ant4	29.181
NVNT	n40	5510	Ant4	58.717
NVNT	n40	5590	Ant4	58.449
NVNT	n40	5670	Ant4	53.409

Test Graphs

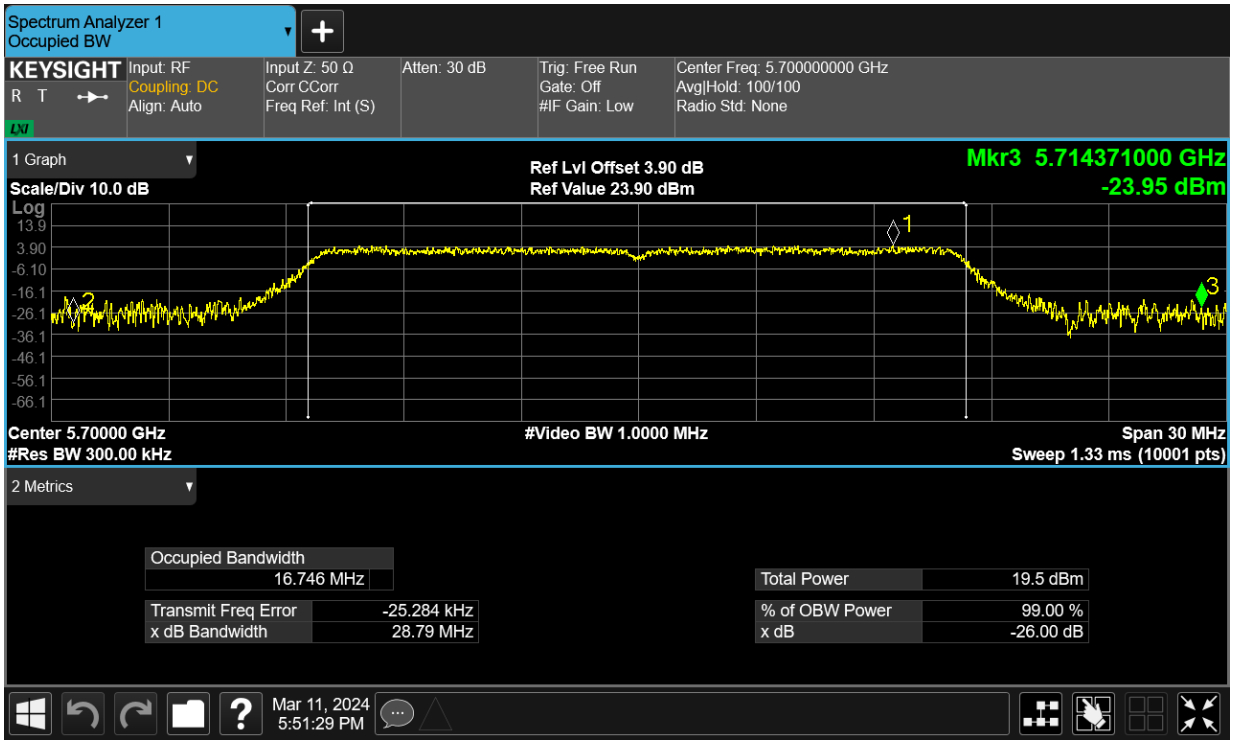
-26dB Bandwidth NVNT a 5500MHz Ant4



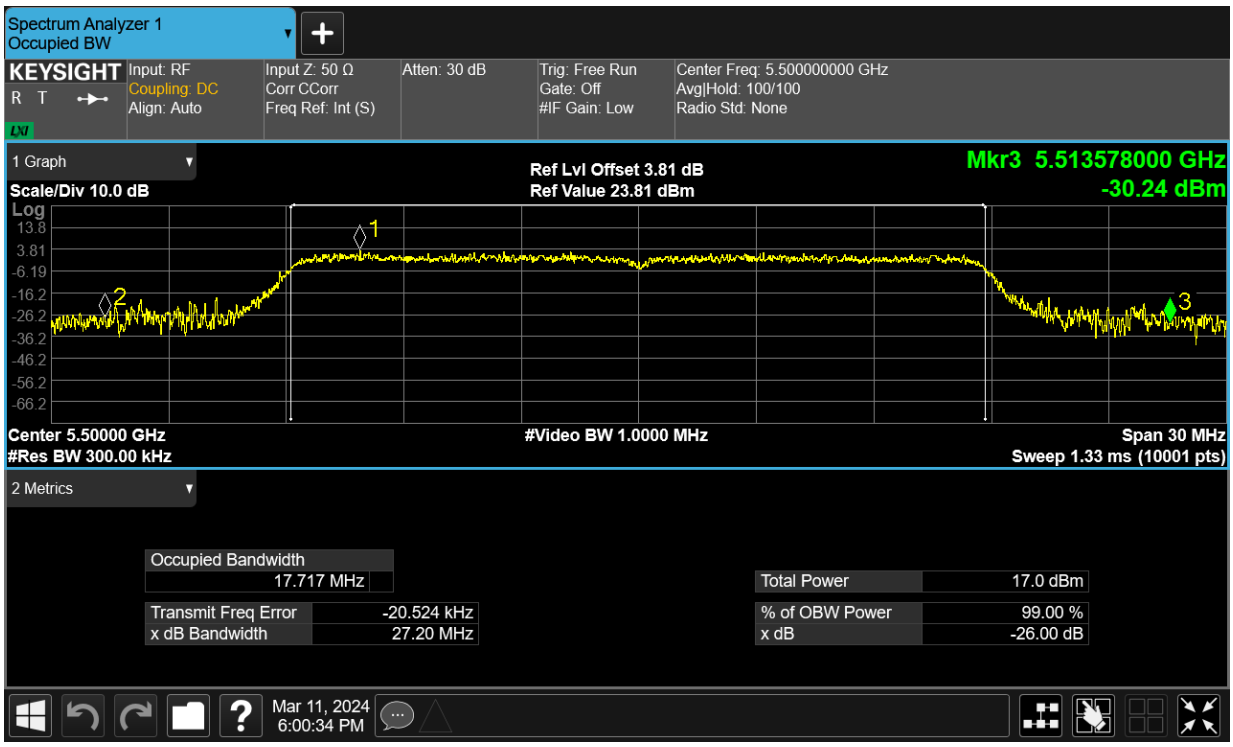
-26dB Bandwidth NVNT a 5600MHz Ant4



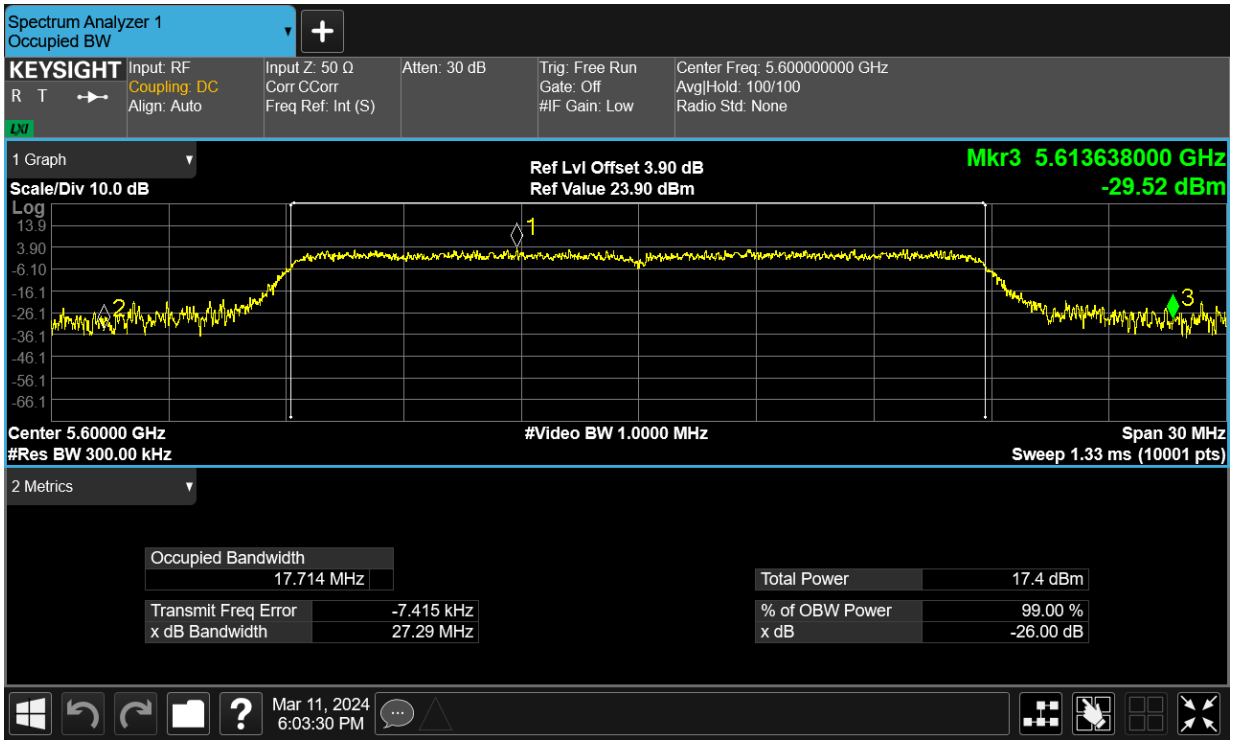
-26dB Bandwidth NVNT a 5700MHz Ant4



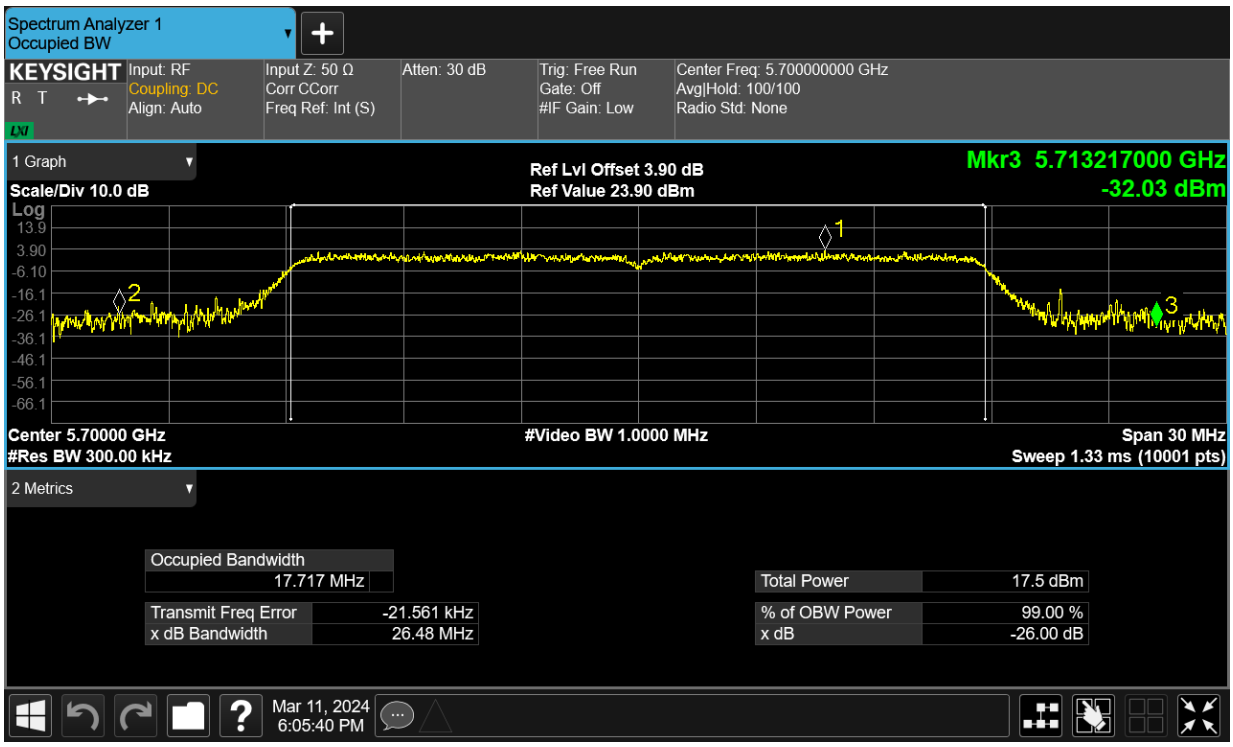
-26dB Bandwidth NVNT ac20 5500MHz Ant4



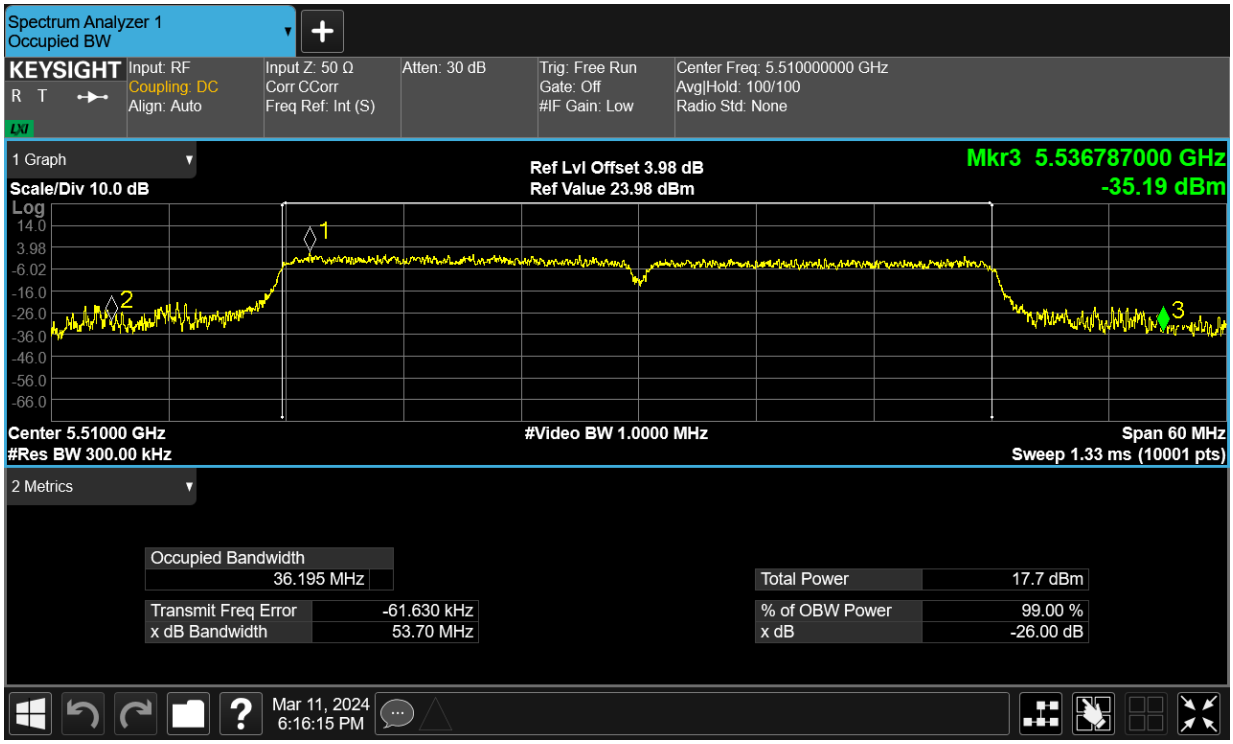
-26dB Bandwidth NVNT ac20 5600MHz Ant4



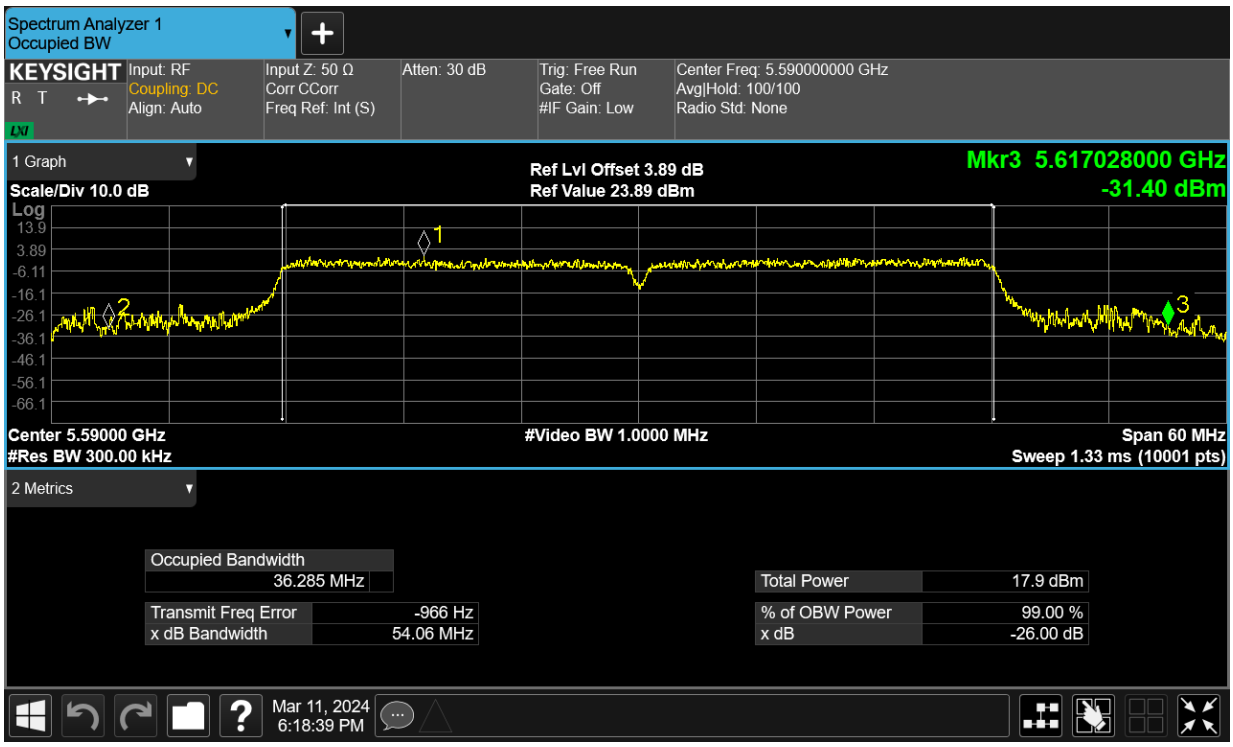
-26dB Bandwidth NVNT ac20 5700MHz Ant4



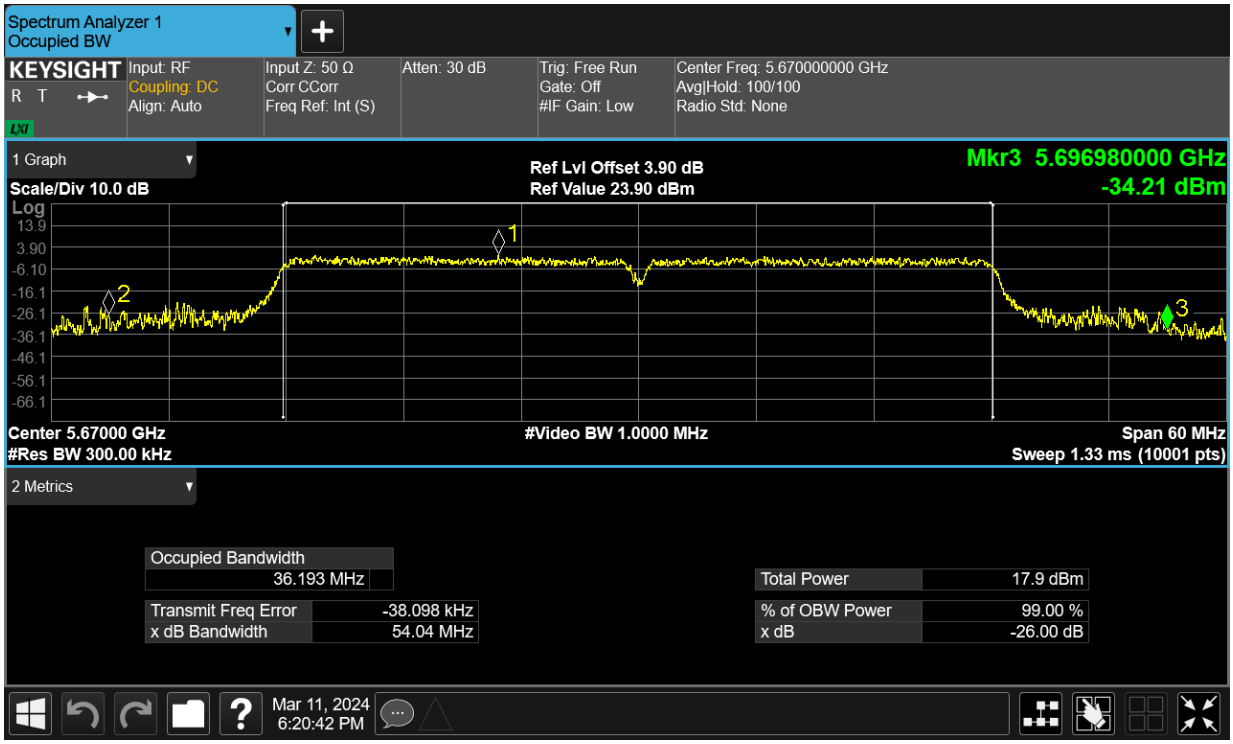
-26dB Bandwidth NVNT ac40 5510MHz Ant4



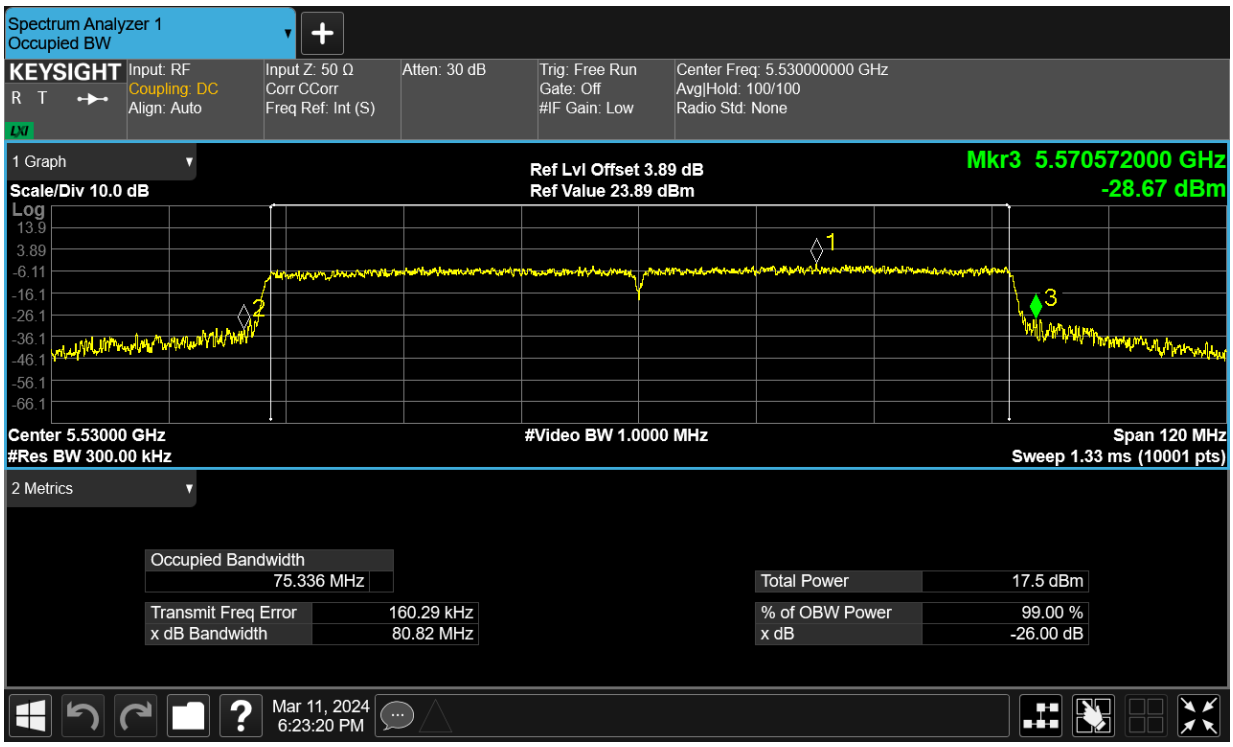
-26dB Bandwidth NVNT ac40 5590MHz Ant4



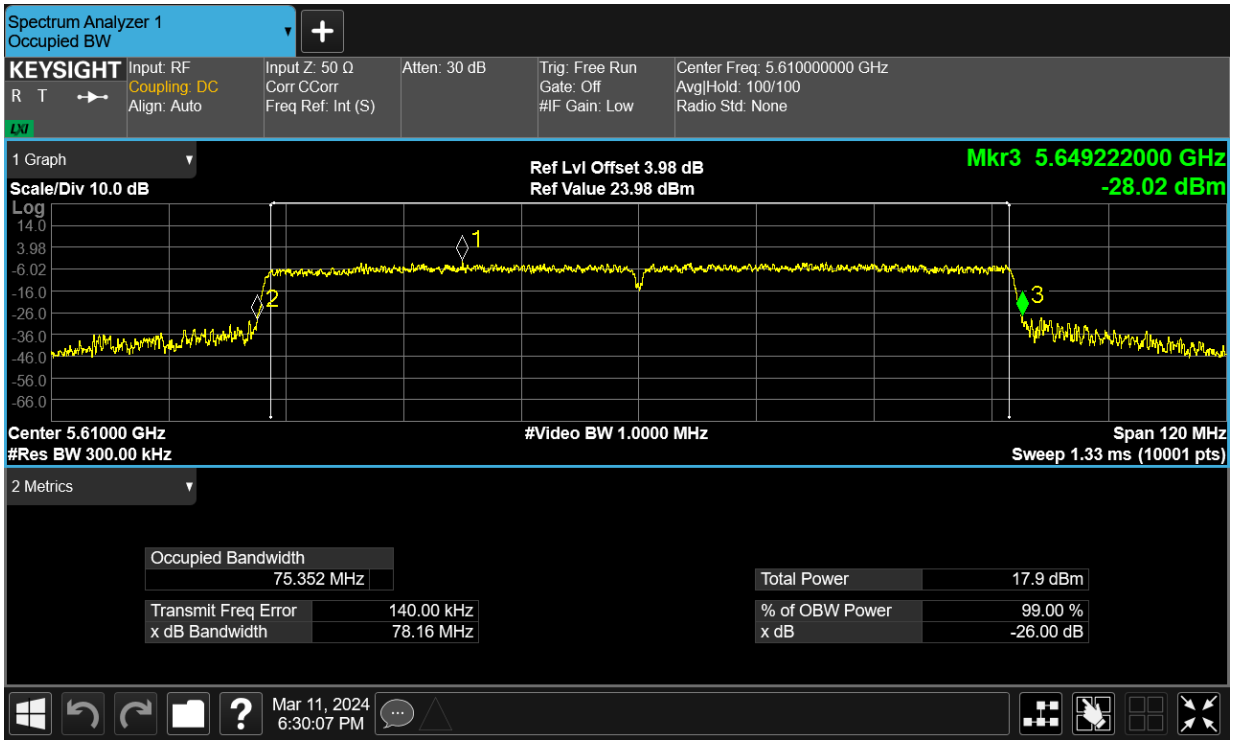
-26dB Bandwidth NVNT ac40 5670MHz Ant4



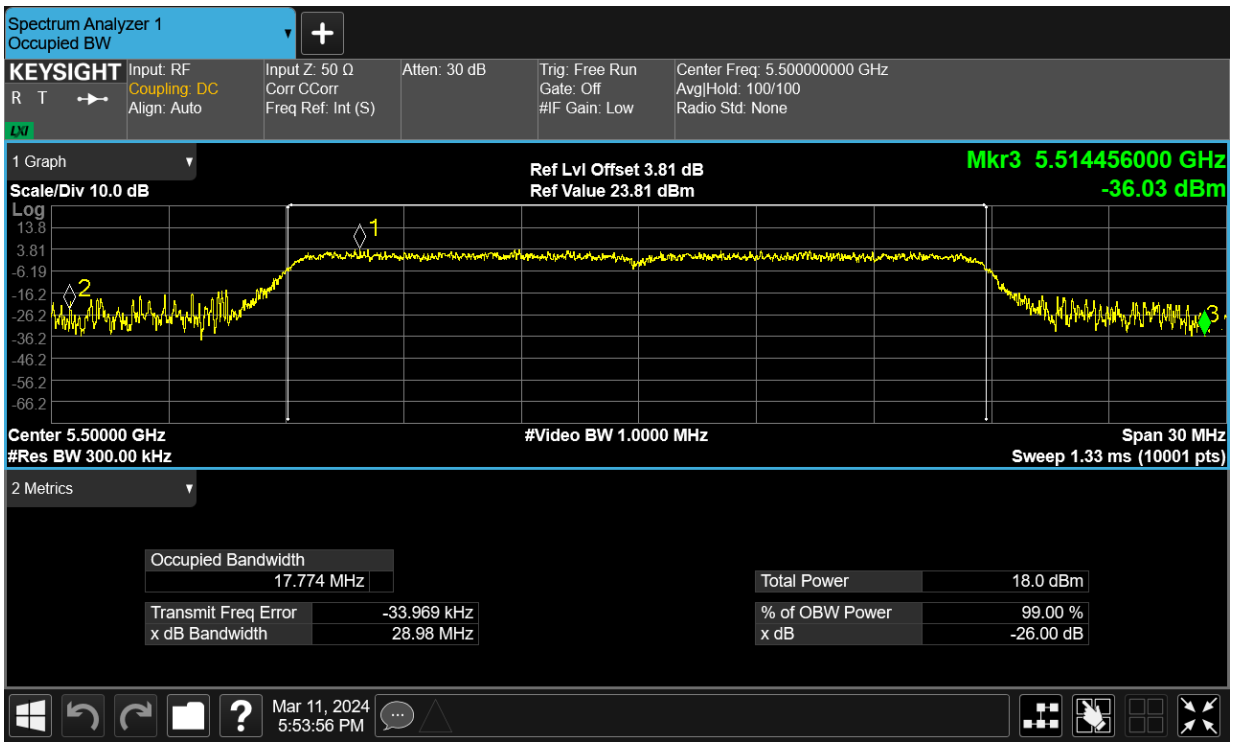
-26dB Bandwidth NVNT ac80 5530MHz Ant4



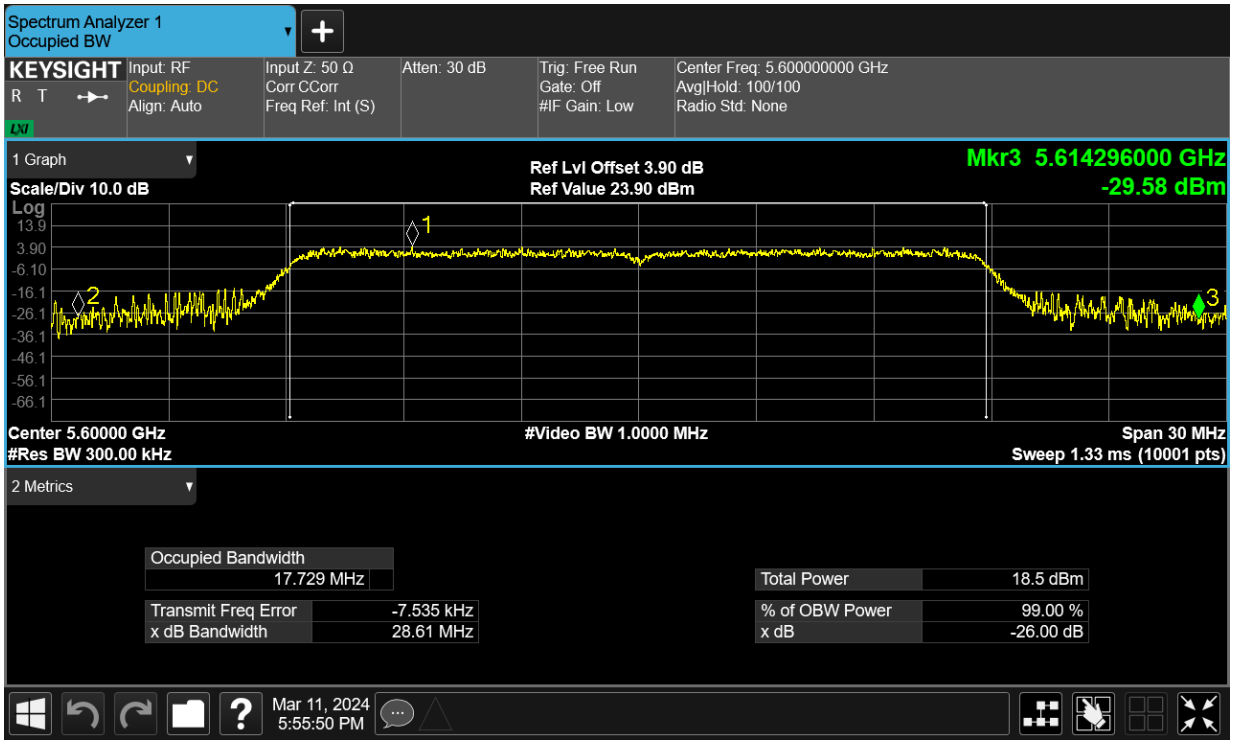
-26dB Bandwidth NVNT ac80 5610MHz Ant4



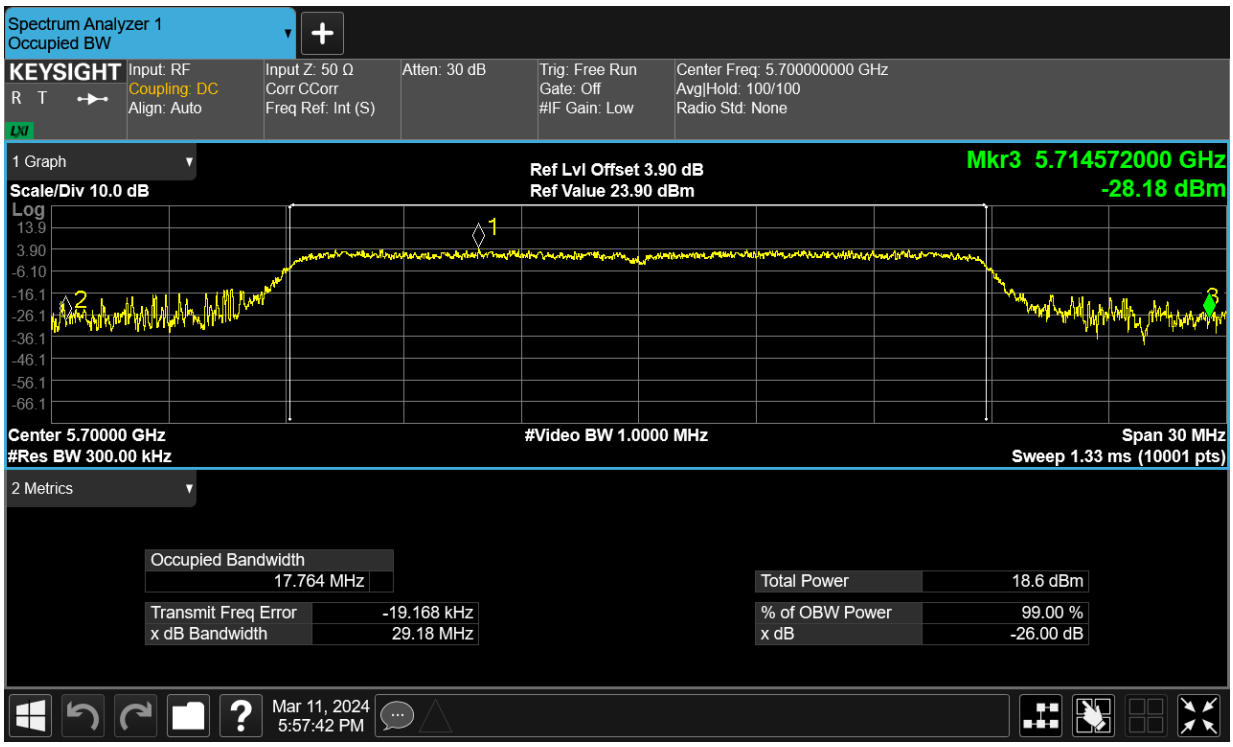
-26dB Bandwidth NVNT n20 5500MHz Ant4



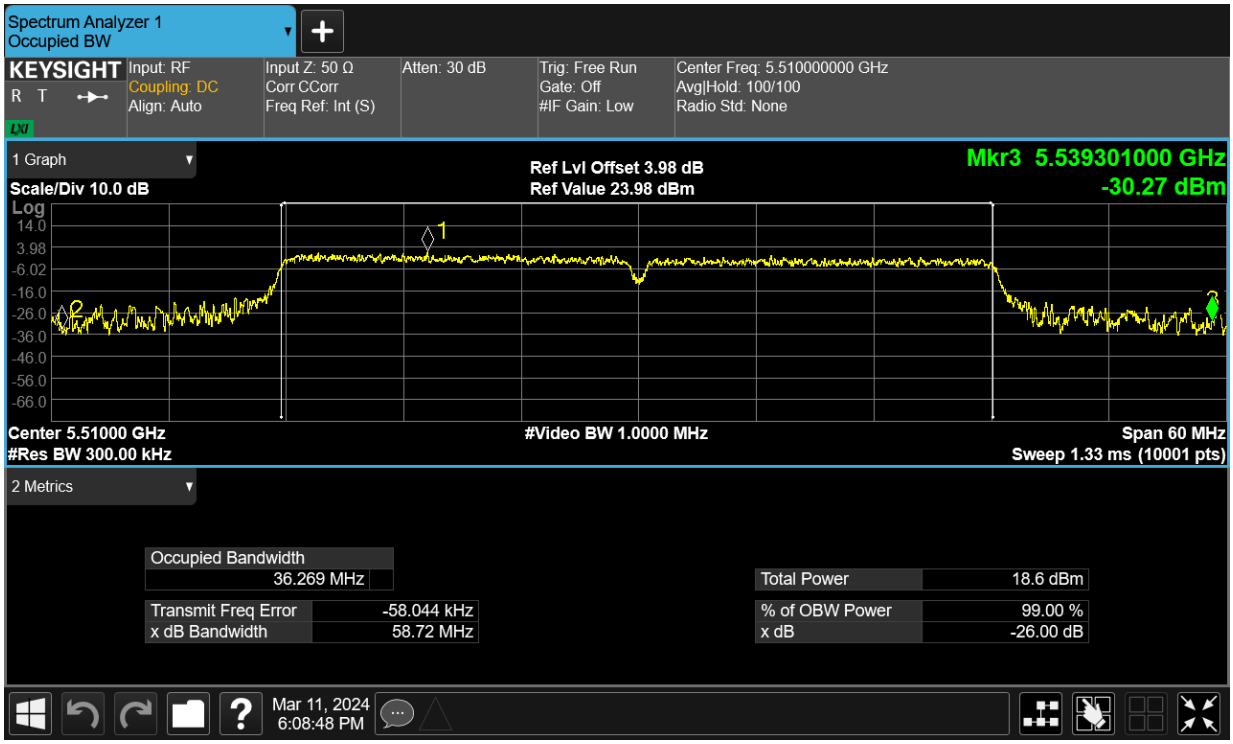
-26dB Bandwidth NVNT n20 5600MHz Ant4



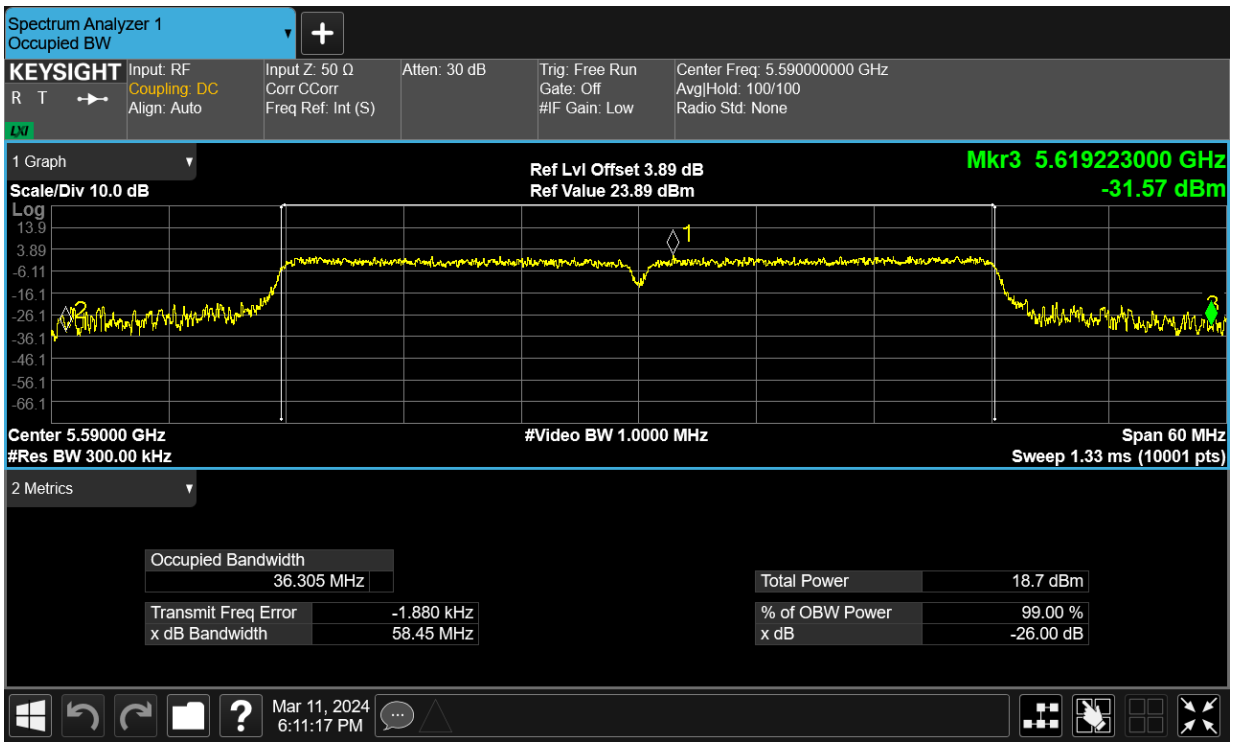
-26dB Bandwidth NVNT n20 5700MHz Ant4



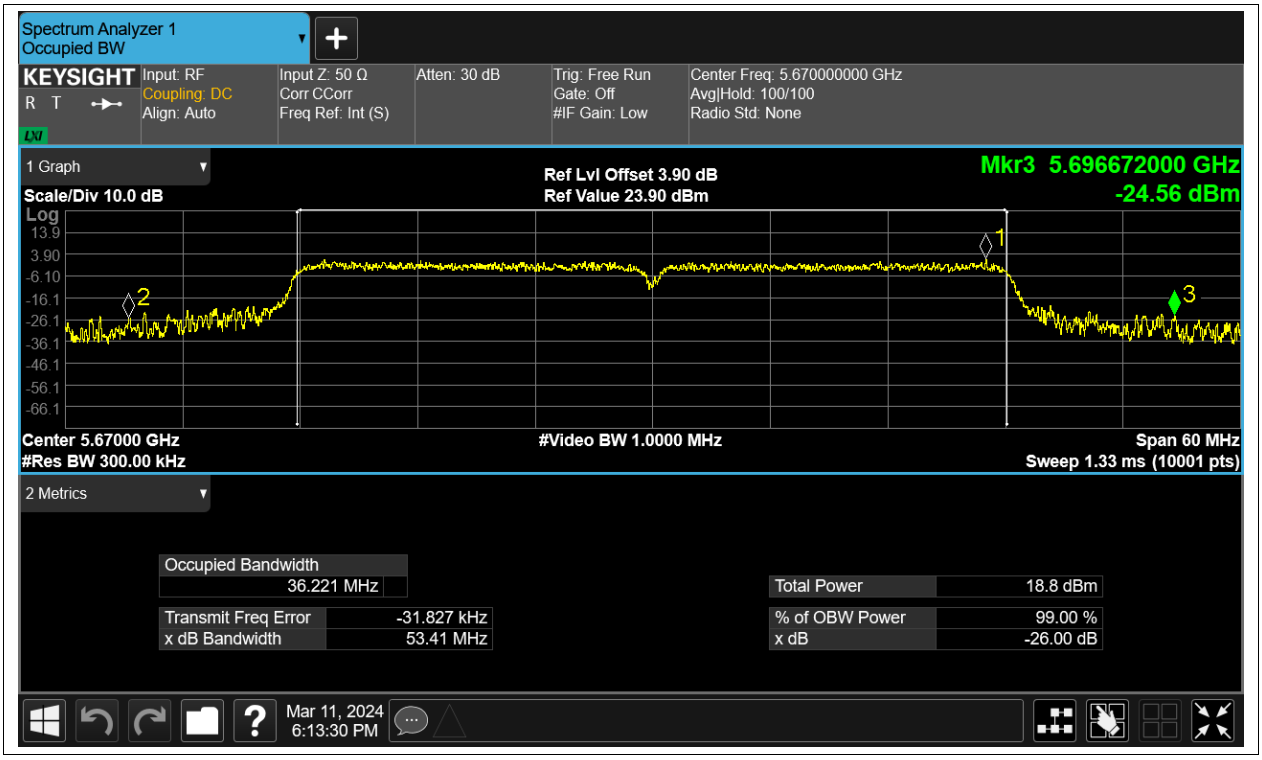
-26dB Bandwidth NVNT n40 5510MHz Ant4



-26dB Bandwidth NVNT n40 5590MHz Ant4



-26dB Bandwidth NVNT n40 5670MHz Ant4

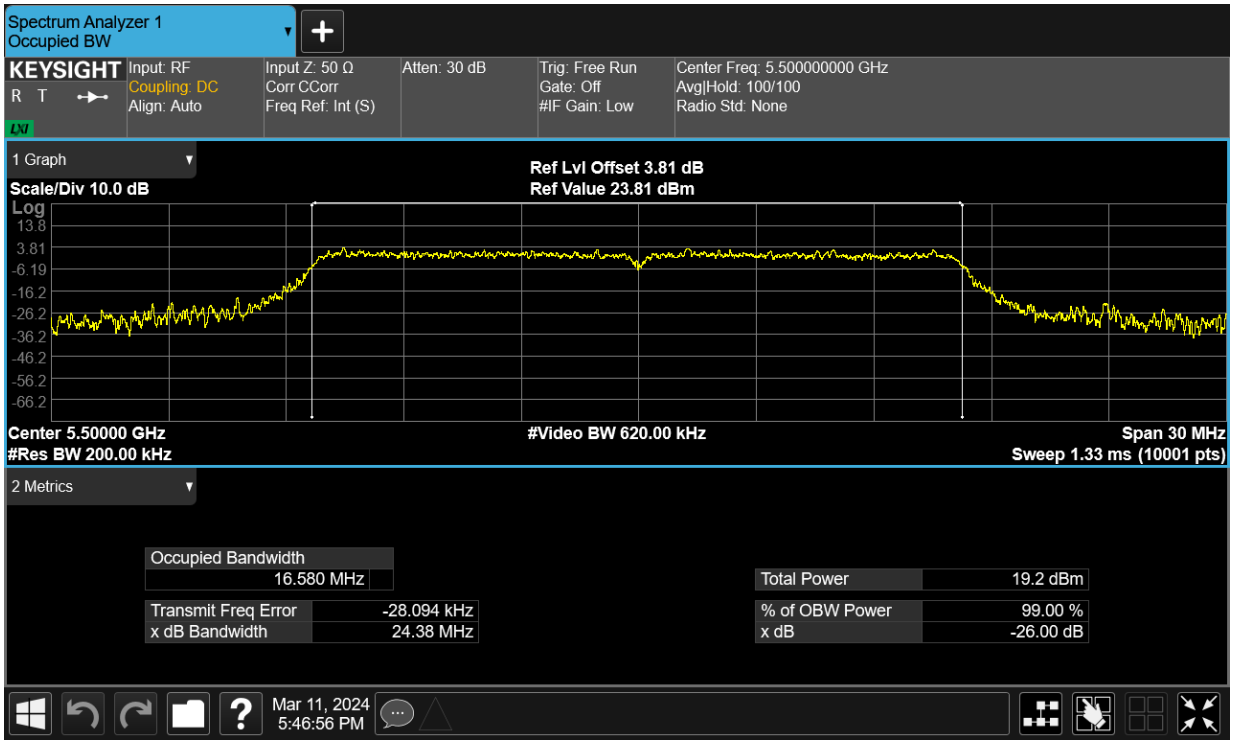

Spectrum Analyzer 1
Occupied BW
KEYSIGHT
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corr CCorr
Freq Ref: Int (S)
Atten: 30 dB
Trig: Free Run
Gate: Off
#IF Gain: Low
Center Freq: 5.670000000 GHz
Avg|Hold: 100/100
Radio Std: None
1 Graph
Scale/Div 10.0 dB
Log
13.9
3.90
-6.10
-16.1
-26.1
-36.1
-46.1
-56.1
-66.1
Ref Lvl Offset 3.90 dB
Ref Value 23.90 dBm
Mkr3 5.696672000 GHz
-24.56 dBm
Center 5.67000 GHz
#Res BW 300.00 kHz
#Video BW 1.0000 MHz
Span 60 MHz
Sweep 1.33 ms (10001 pts)
2 Metrics
Occupied Bandwidth
36.221 MHz
Transmit Freq Error -31.827 kHz
x dB Bandwidth 53.41 MHz
Total Power 18.8 dBm
% of OBW Power 99.00 %
x dB -26.00 dB
Mar 11, 2024
6:13:30 PM

Occupied Channel Bandwidth

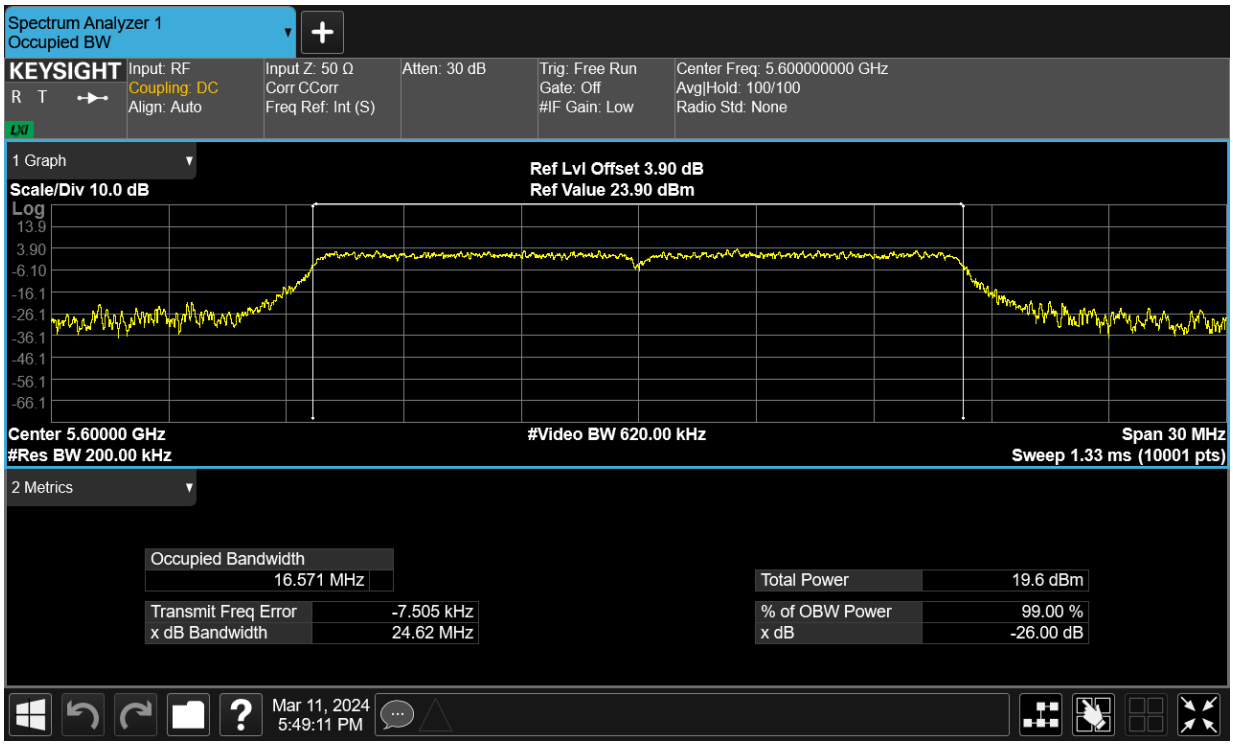
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	a	5500	Ant4	16.58
NVNT	a	5600	Ant4	16.571
NVNT	a	5700	Ant4	16.575
NVNT	ac20	5500	Ant4	17.623
NVNT	ac20	5600	Ant4	17.601
NVNT	ac20	5700	Ant4	17.625
NVNT	ac40	5510	Ant4	36.311
NVNT	ac40	5590	Ant4	36.385
NVNT	ac40	5670	Ant4	36.309
NVNT	ac80	5530	Ant4	75.473
NVNT	ac80	5610	Ant4	75.413
NVNT	n20	5500	Ant4	17.682
NVNT	n20	5600	Ant4	17.62
NVNT	n20	5700	Ant4	17.637
NVNT	n40	5510	Ant4	36.246
NVNT	n40	5590	Ant4	36.37
NVNT	n40	5670	Ant4	36.345

Test Graphs

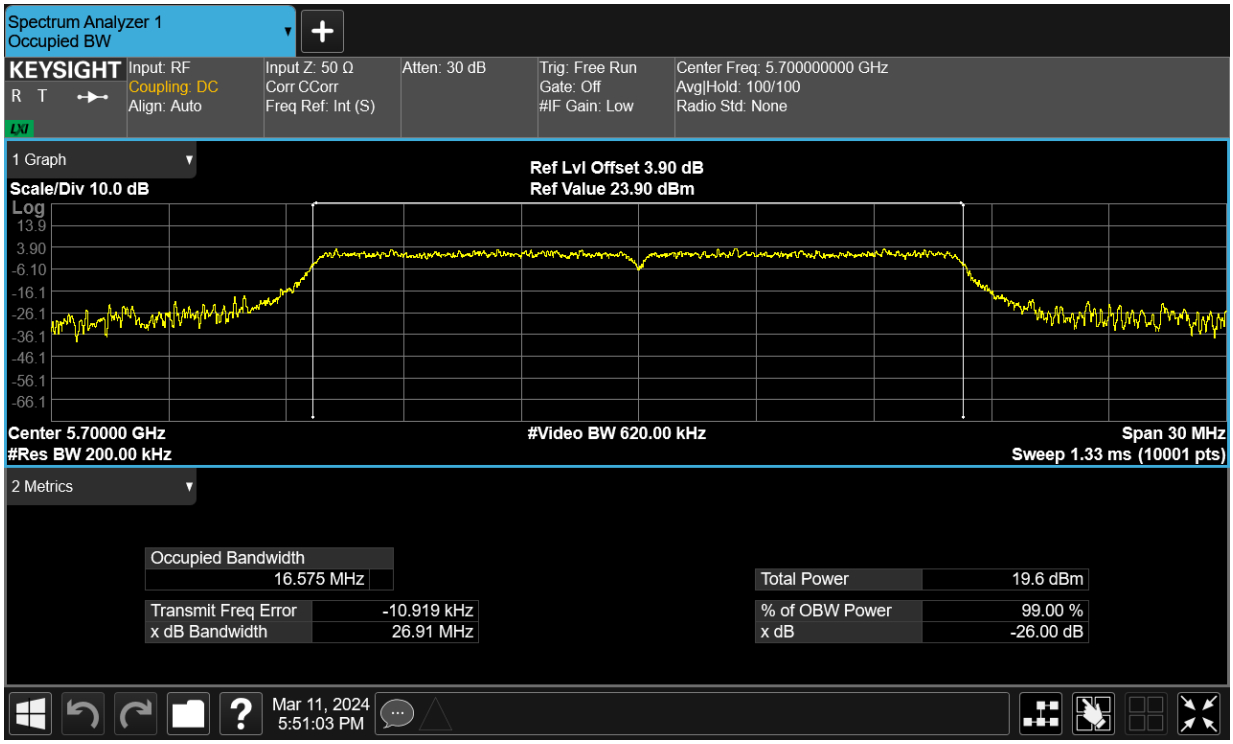
OBW NVNT a 5500MHz Ant4



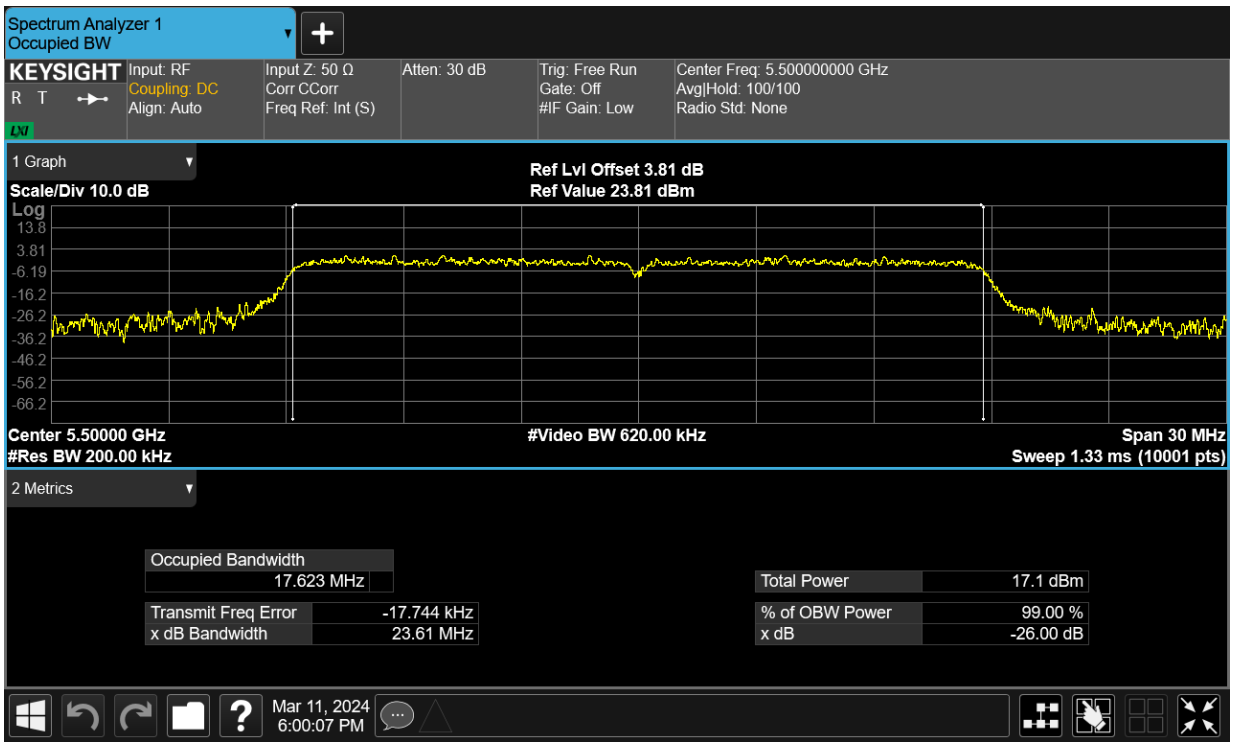
OBW NVNT a 5600MHz Ant4



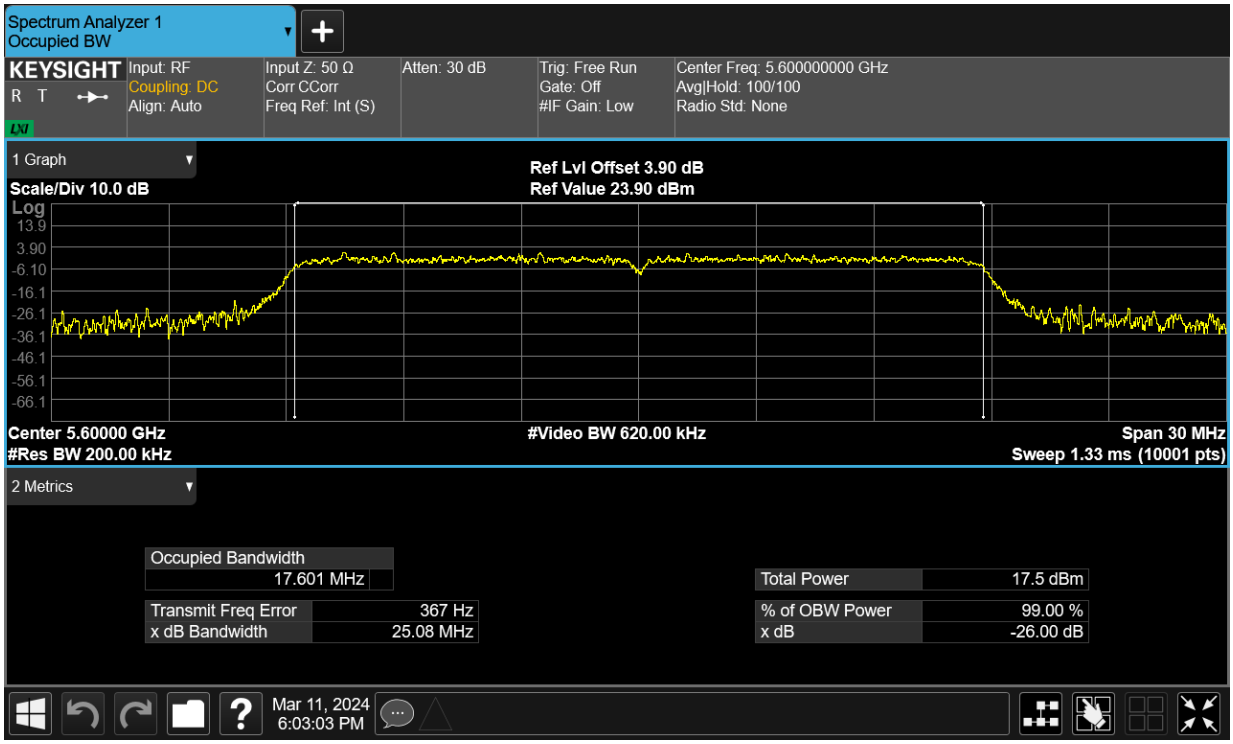
OBW NVNT a 5700MHz Ant4



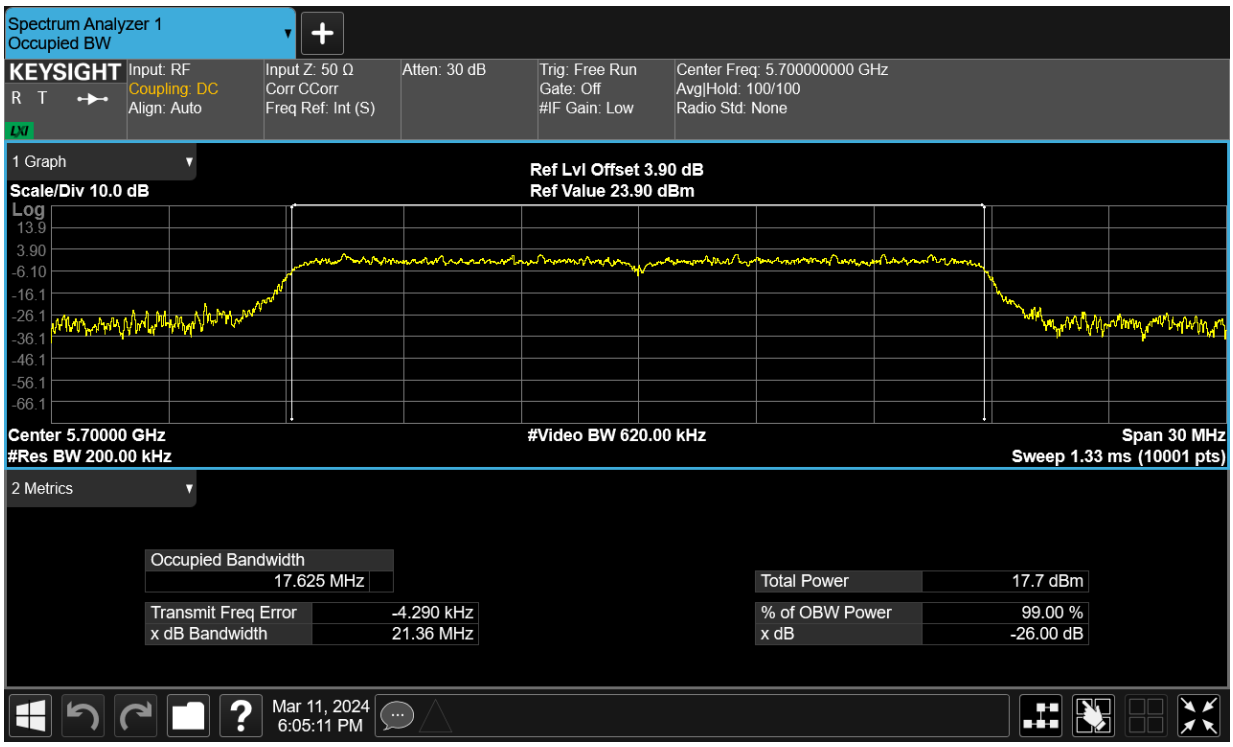
OBW NVNT ac20 5500MHz Ant4



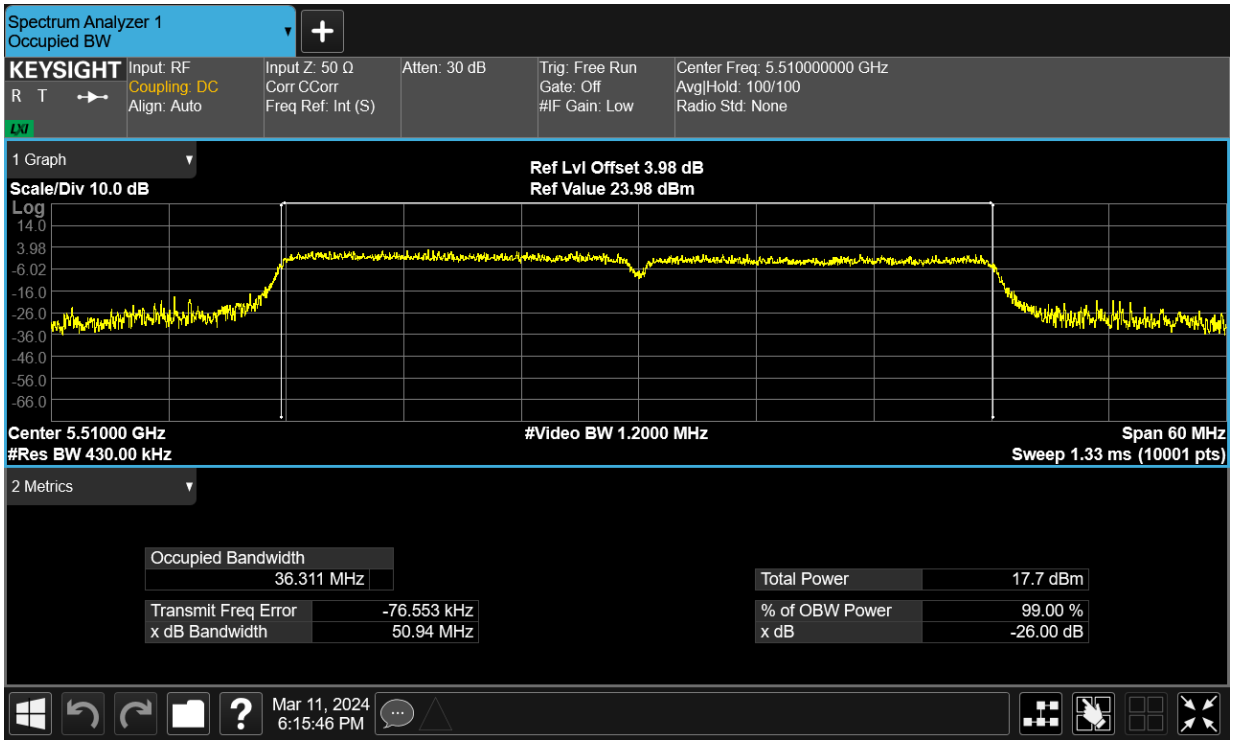
OBW NVNT ac20 5600MHz Ant4



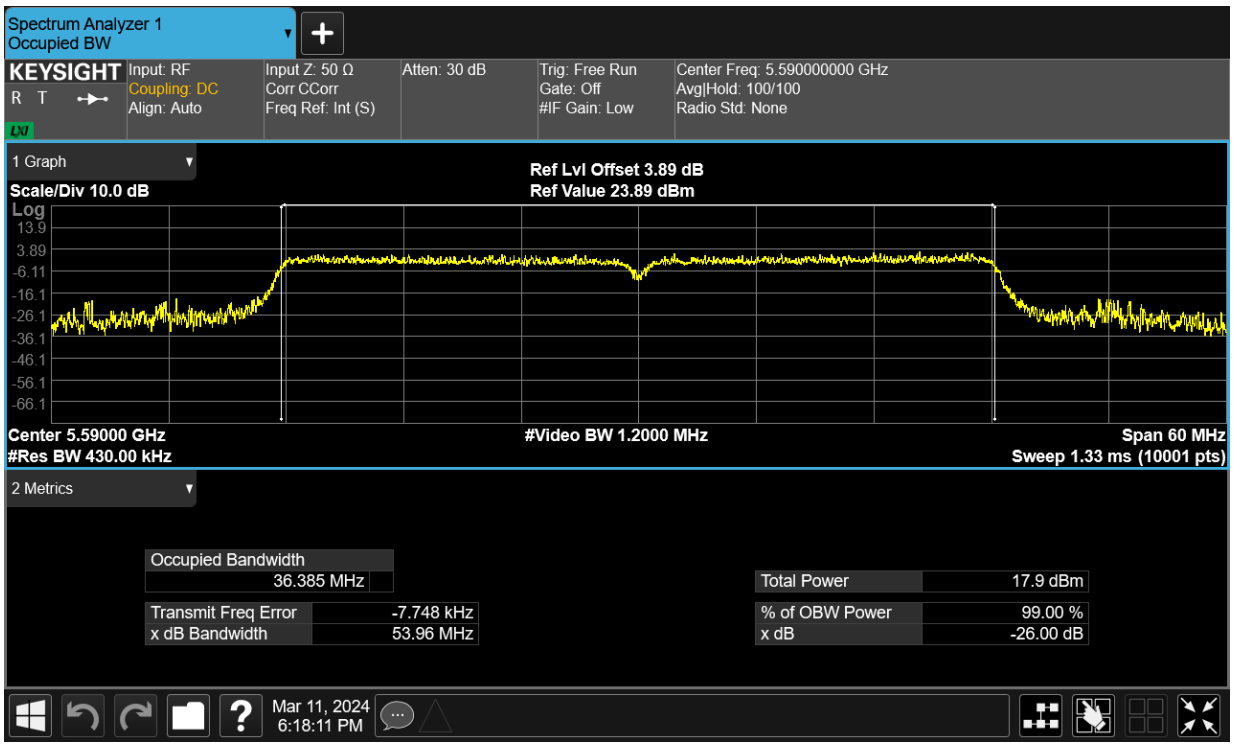
OBW NVNT ac20 5700MHz Ant4



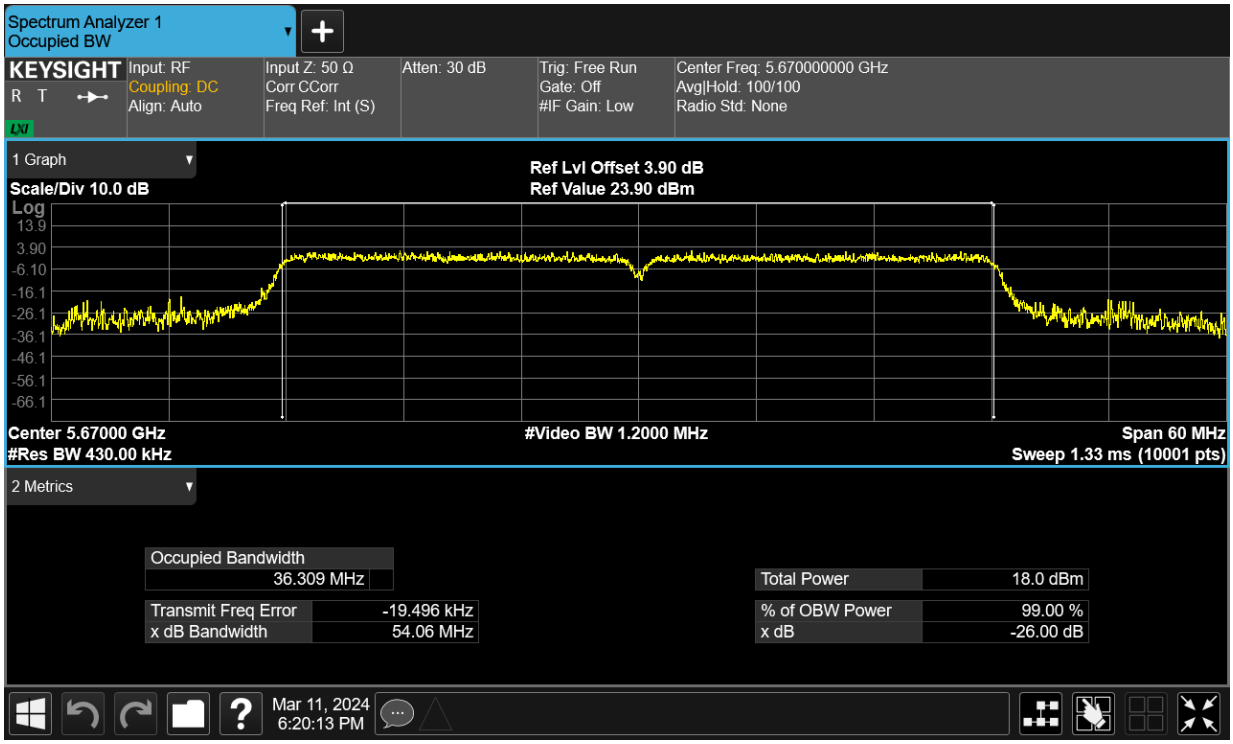
OBW NVNT ac40 5510MHz Ant4



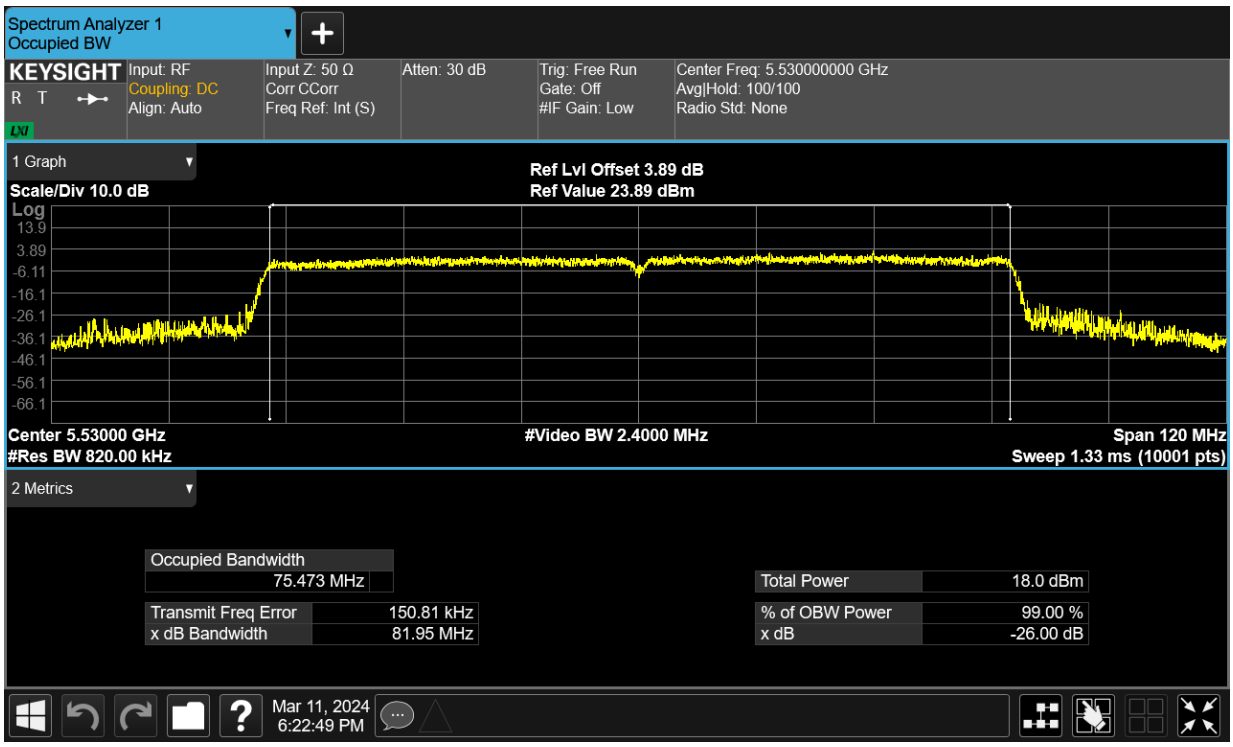
OBW NVNT ac40 5590MHz Ant4



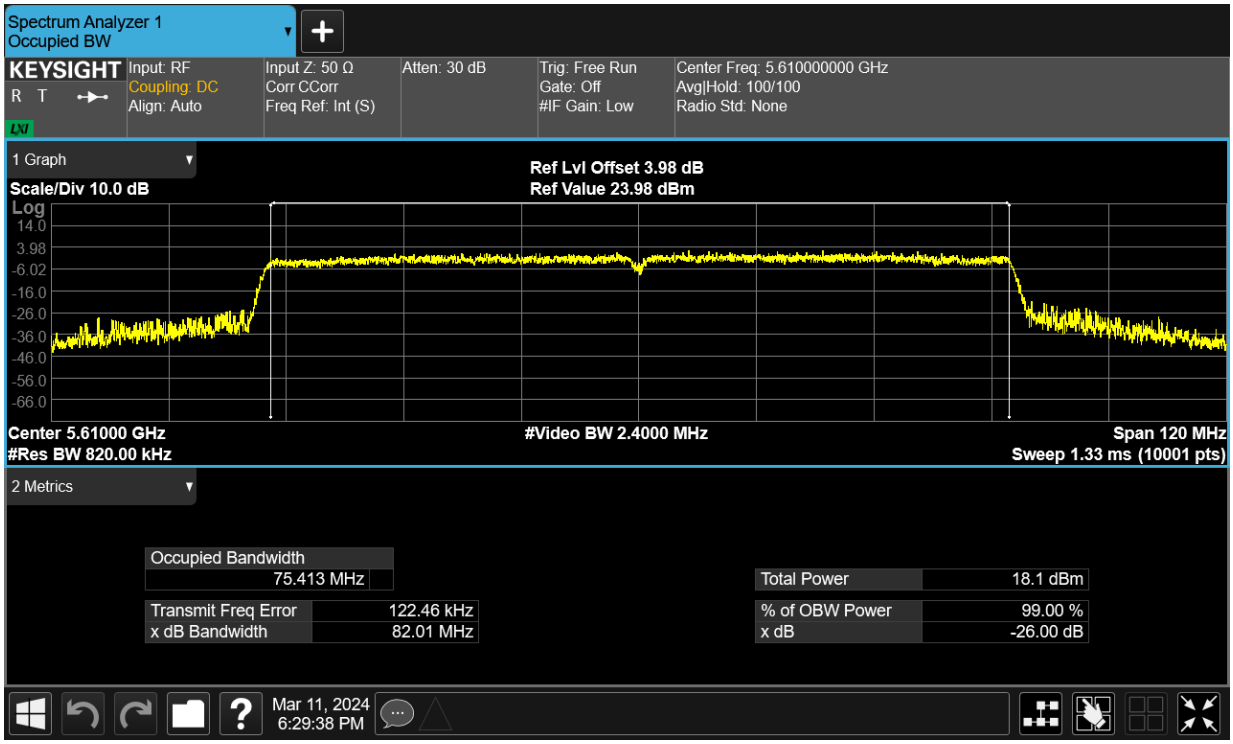
OBW NVNT ac40 5670MHz Ant4



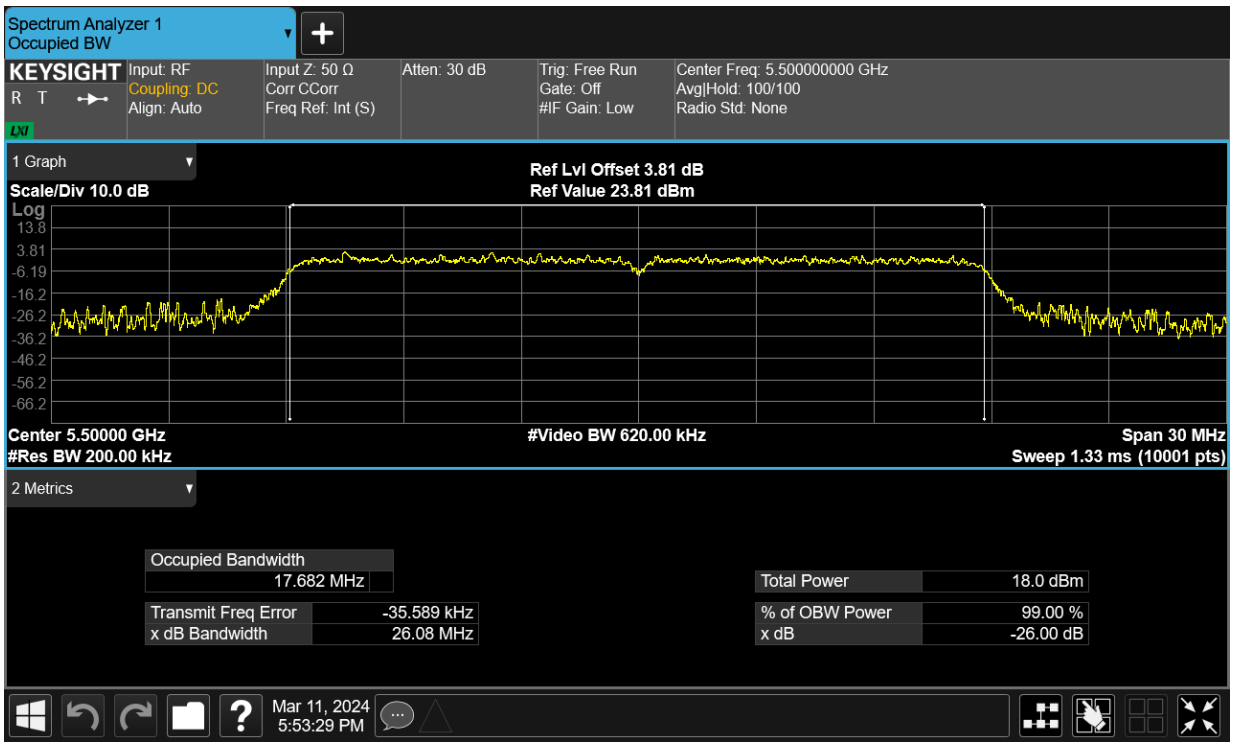
OBW NVNT ac80 5530MHz Ant4



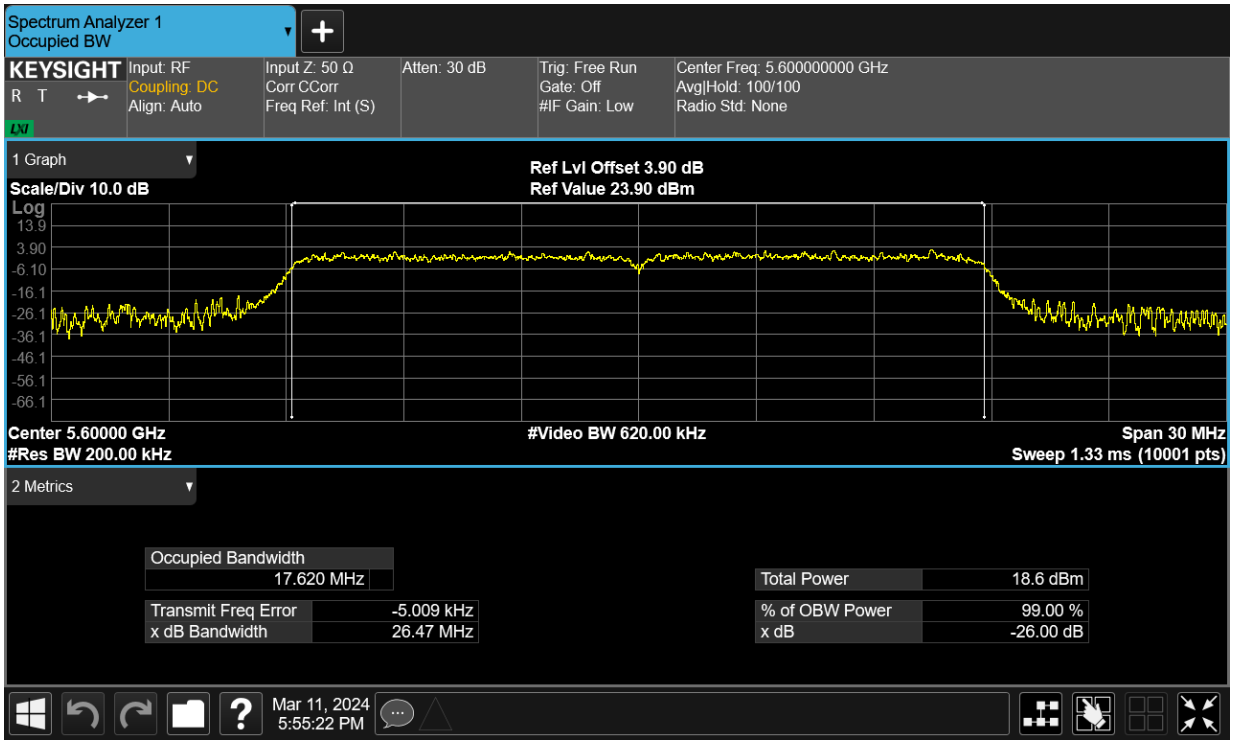
OBW NVNT ac80 5610MHz Ant4



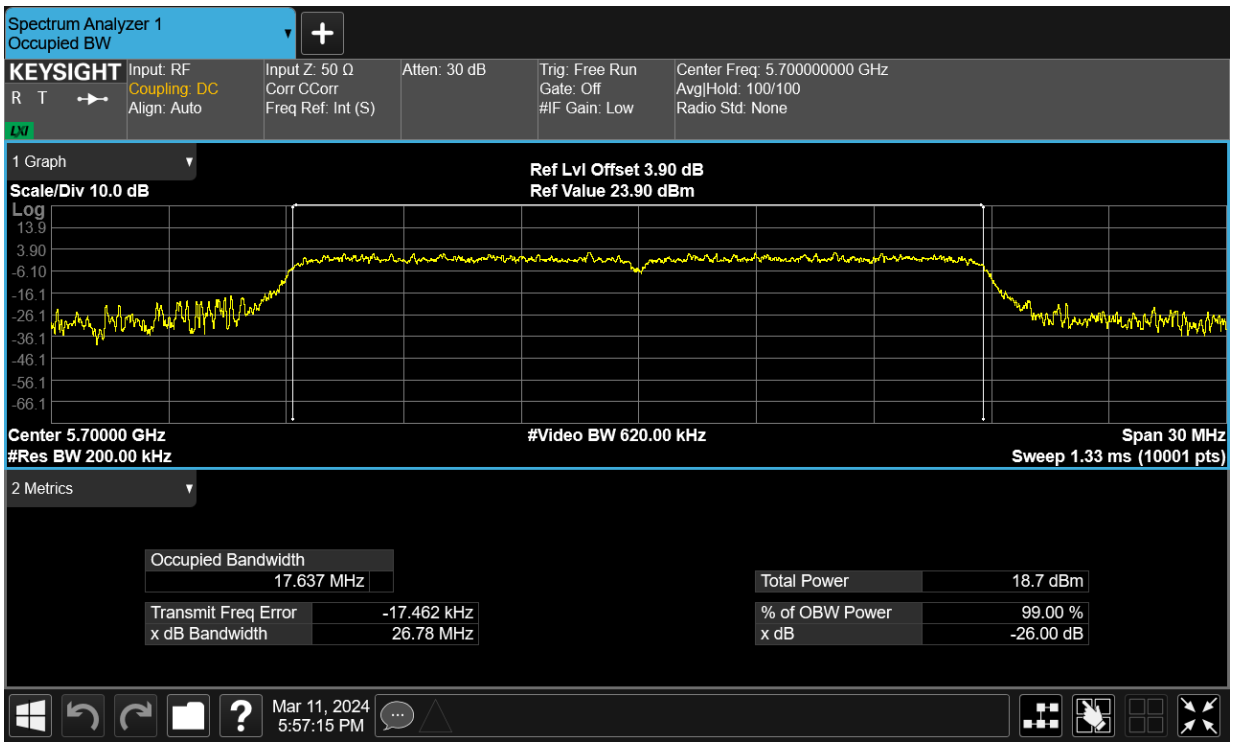
OBW NVNT n20 5500MHz Ant4



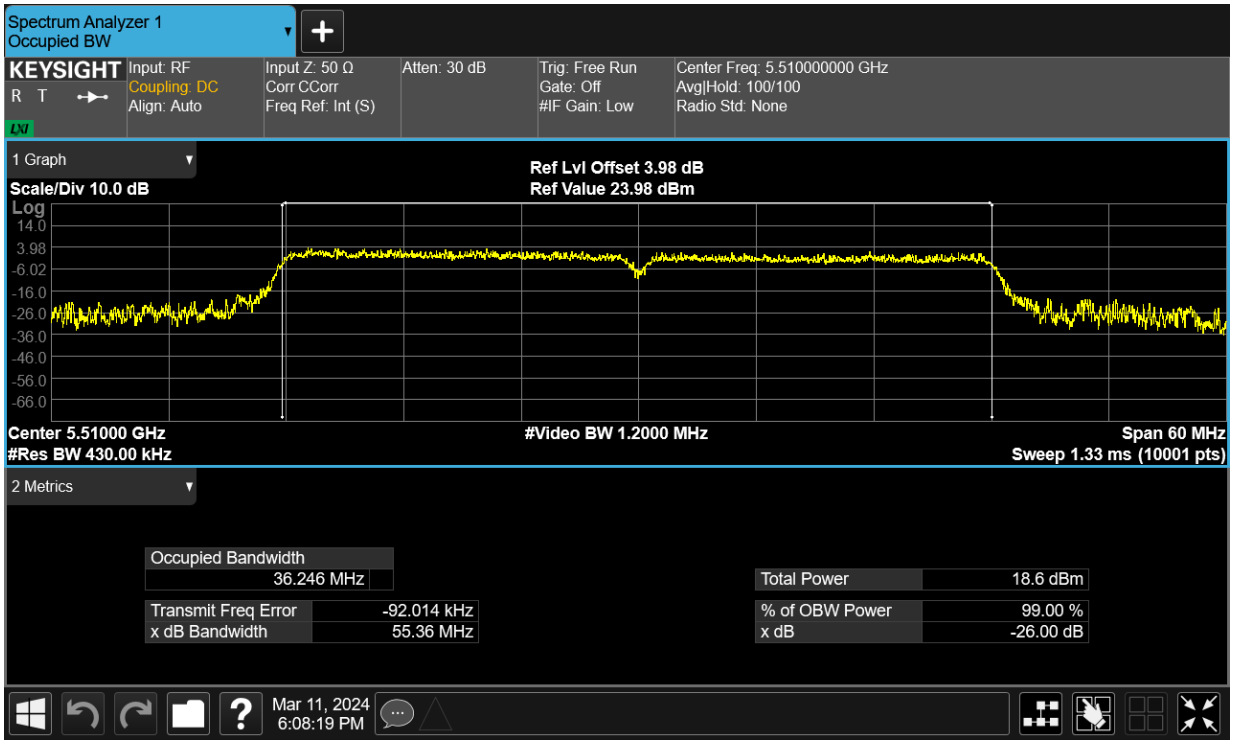
OBW NVNT n20 5600MHz Ant4



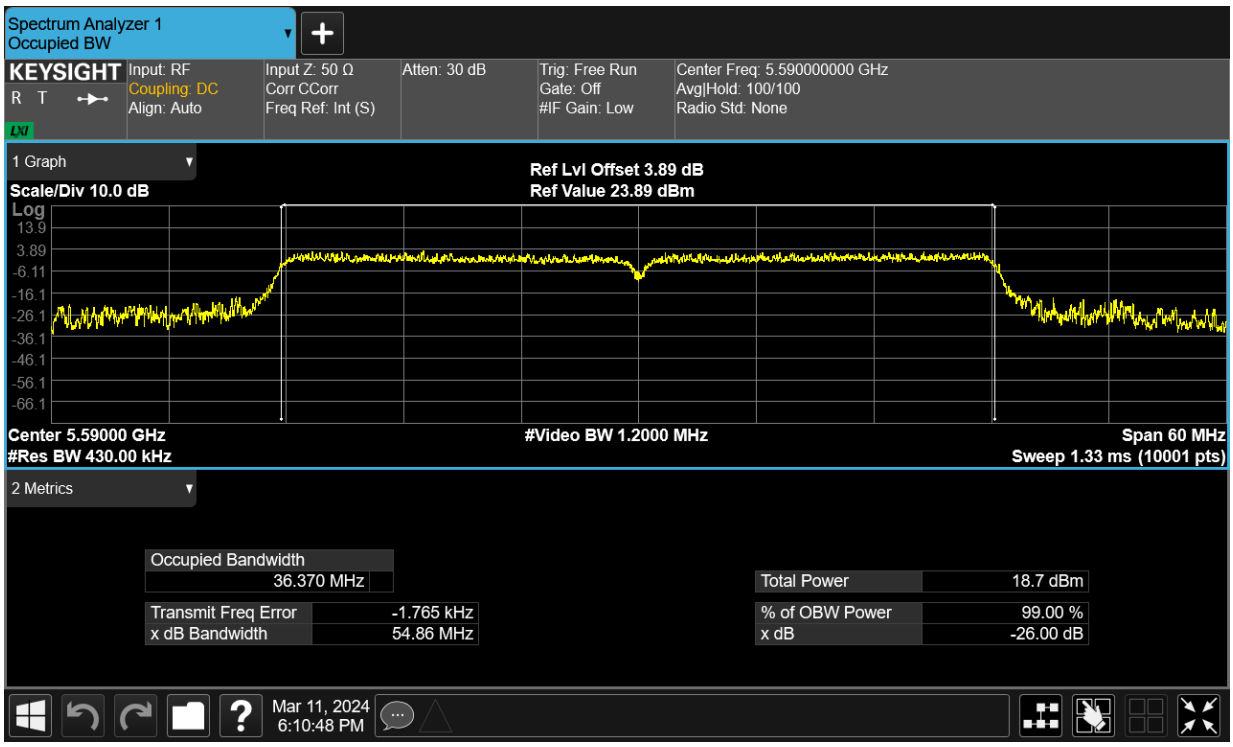
OBW NVNT n20 5700MHz Ant4



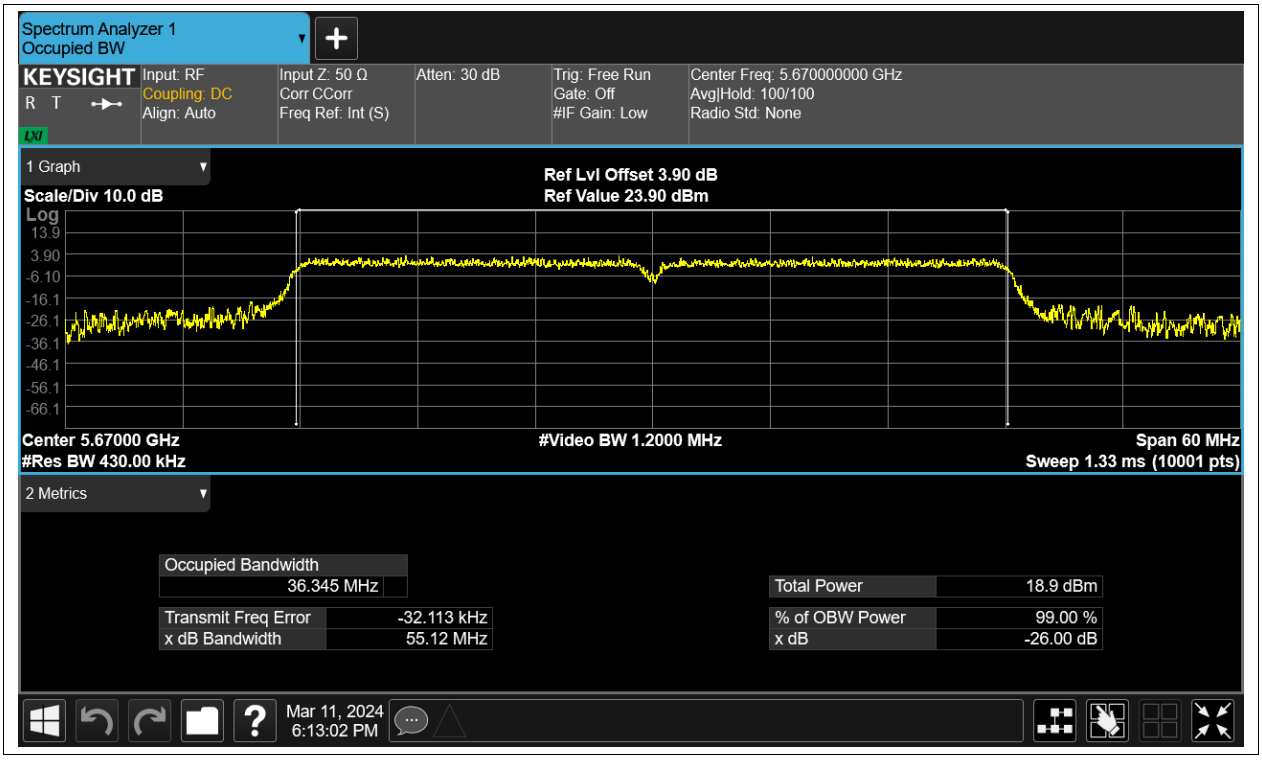
OBW NVNT n40 5510MHz Ant4



OBW NVNT n40 5590MHz Ant4



OBW NVNT n40 5670MHz Ant4

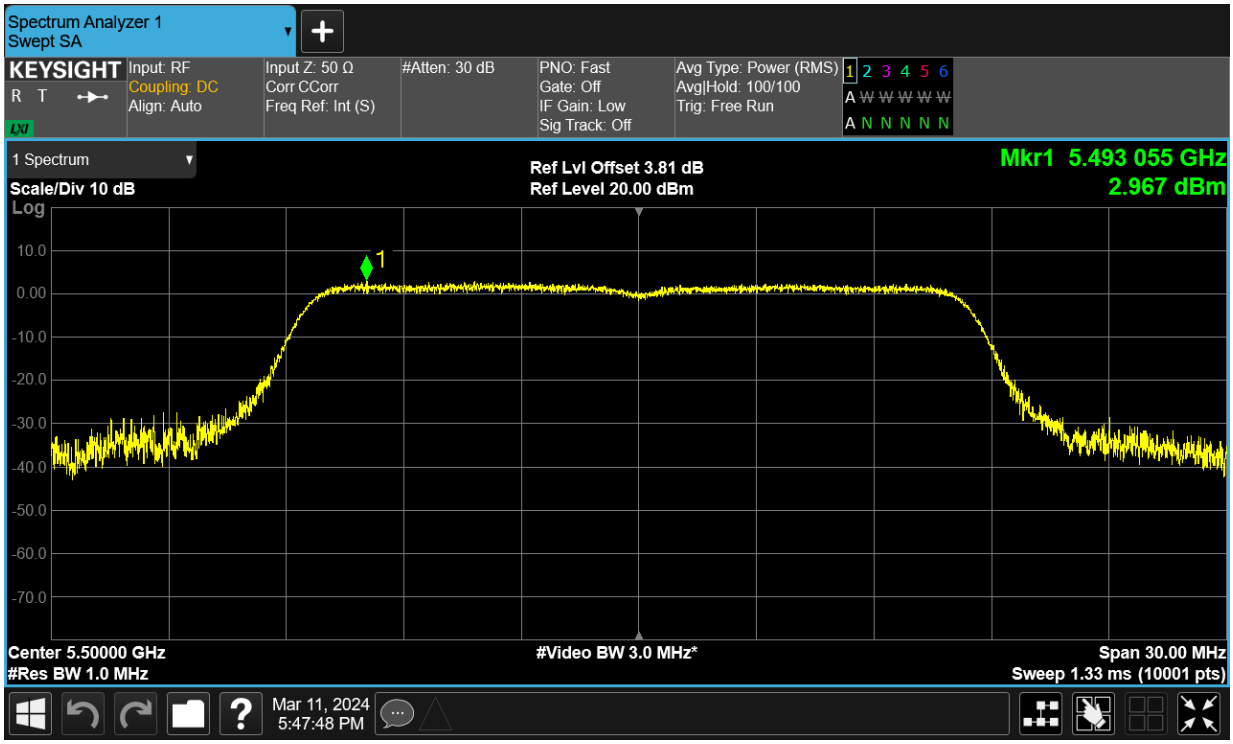

Spectrum Analyzer 1
Occupied BW
KEYSIGHT
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corr CCorr
Freq Ref: Int (S)
Atten: 30 dB
Trig: Free Run
Gate: Off
#IF Gain: Low
Center Freq: 5.670000000 GHz
Avg|Hold: 100/100
Radio Std: None
1 Graph
Ref Lvl Offset 3.90 dB
Ref Value 23.90 dBm
Scale/Div 10.0 dB
Log
13.9
3.90
-6.10
-16.1
-26.1
-36.1
-46.1
-56.1
-66.1
Center 5.67000 GHz
#Res BW 430.00 kHz
#Video BW 1.2000 MHz
Span 60 MHz
Sweep 1.33 ms (10001 pts)
2 Metrics
Occupied Bandwidth
36.345 MHz
Transmit Freq Error -32.113 kHz
x dB Bandwidth 55.12 MHz
Total Power 18.9 dBm
% of OBW Power 99.00 %
x dB -26.00 dB
Mar 11, 2024
6:13:02 PM

Maximum Power Spectral Density Level

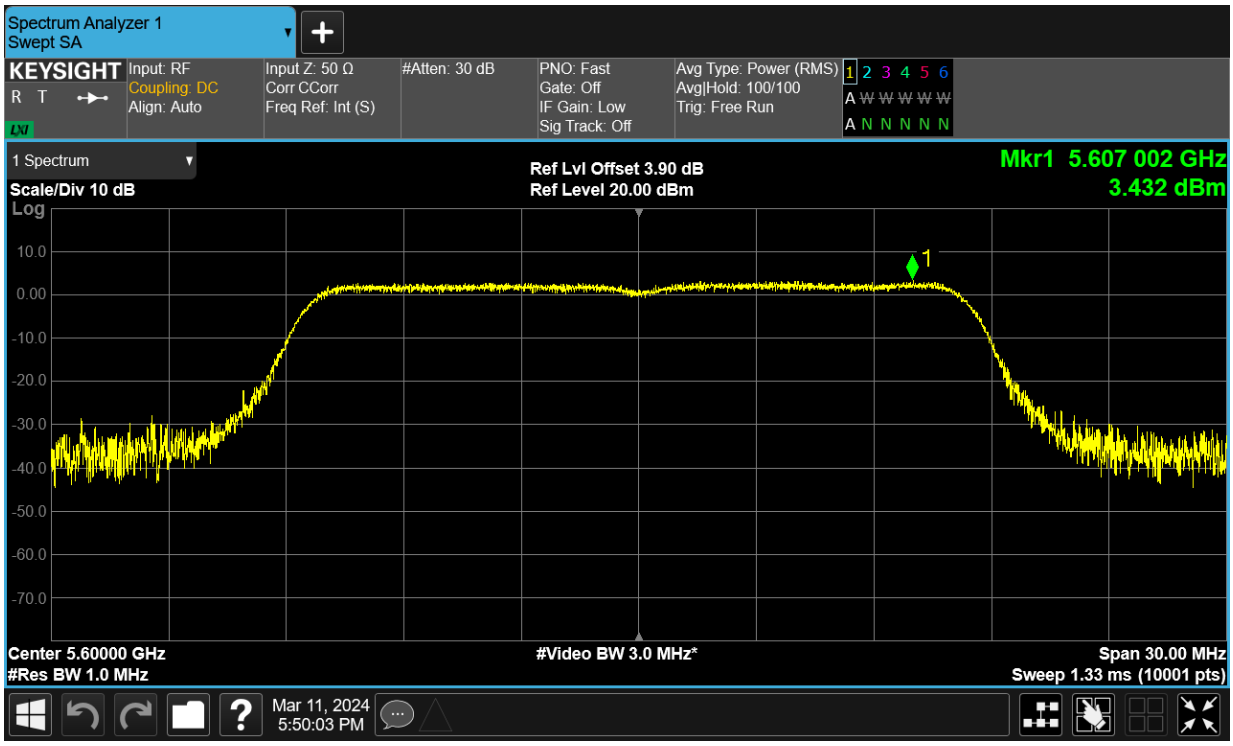
Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Limit (dBm)	Verdict
NVNT	a	5500	Ant4	2.967	11	Pass
NVNT	a	5600	Ant4	3.432	11	Pass
NVNT	a	5700	Ant4	2.953	11	Pass
NVNT	ac20	5500	Ant4	0.387	11	Pass
NVNT	ac20	5600	Ant4	0.634	11	Pass
NVNT	ac20	5700	Ant4	1.131	11	Pass
NVNT	ac40	5510	Ant4	-1.477	11	Pass
NVNT	ac40	5590	Ant4	-2.179	11	Pass
NVNT	ac40	5670	Ant4	-1.914	11	Pass
NVNT	ac80	5530	Ant4	-6.078	11	Pass
NVNT	ac80	5610	Ant4	-6.042	11	Pass
NVNT	n20	5500	Ant4	1.215	11	Pass
NVNT	n20	5600	Ant4	2.006	11	Pass
NVNT	n20	5700	Ant4	2.19	11	Pass
NVNT	n40	5510	Ant4	-0.936	11	Pass
NVNT	n40	5590	Ant4	-1.488	11	Pass
NVNT	n40	5667	Ant4	-1.264	11	Pass

Test Graphs

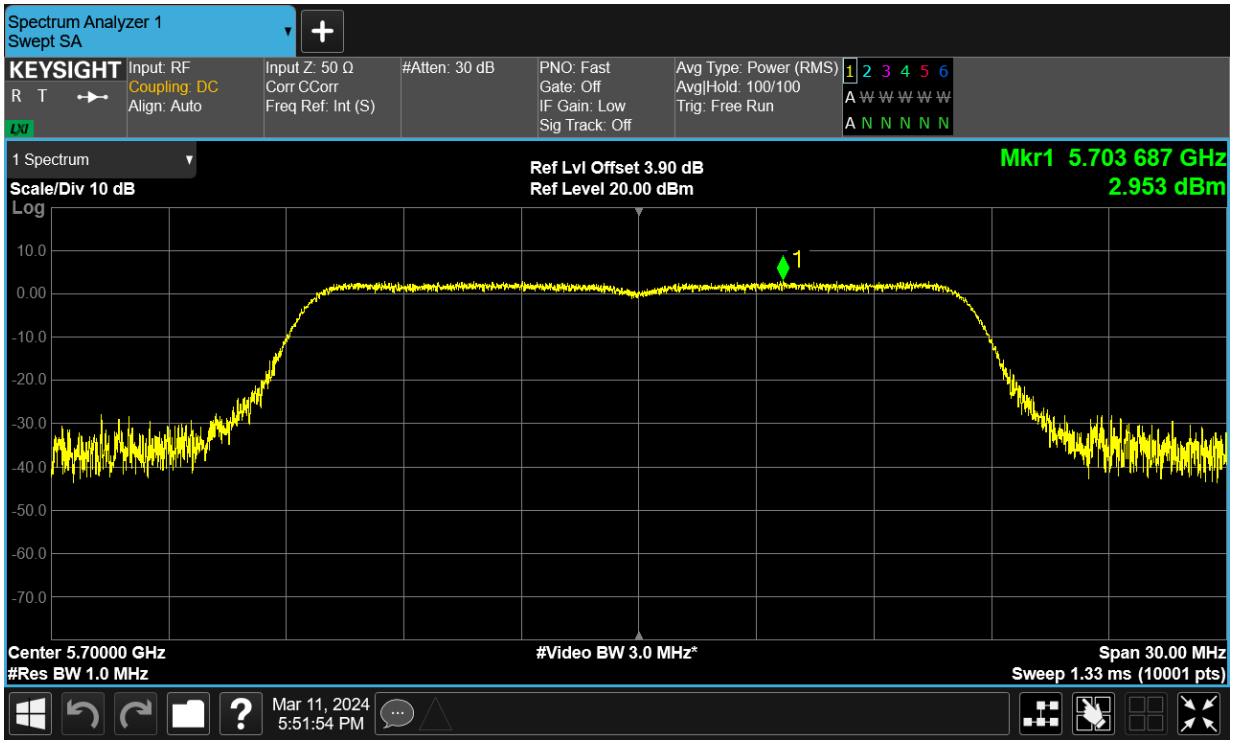
PSD NVNT a 5500MHz Ant4



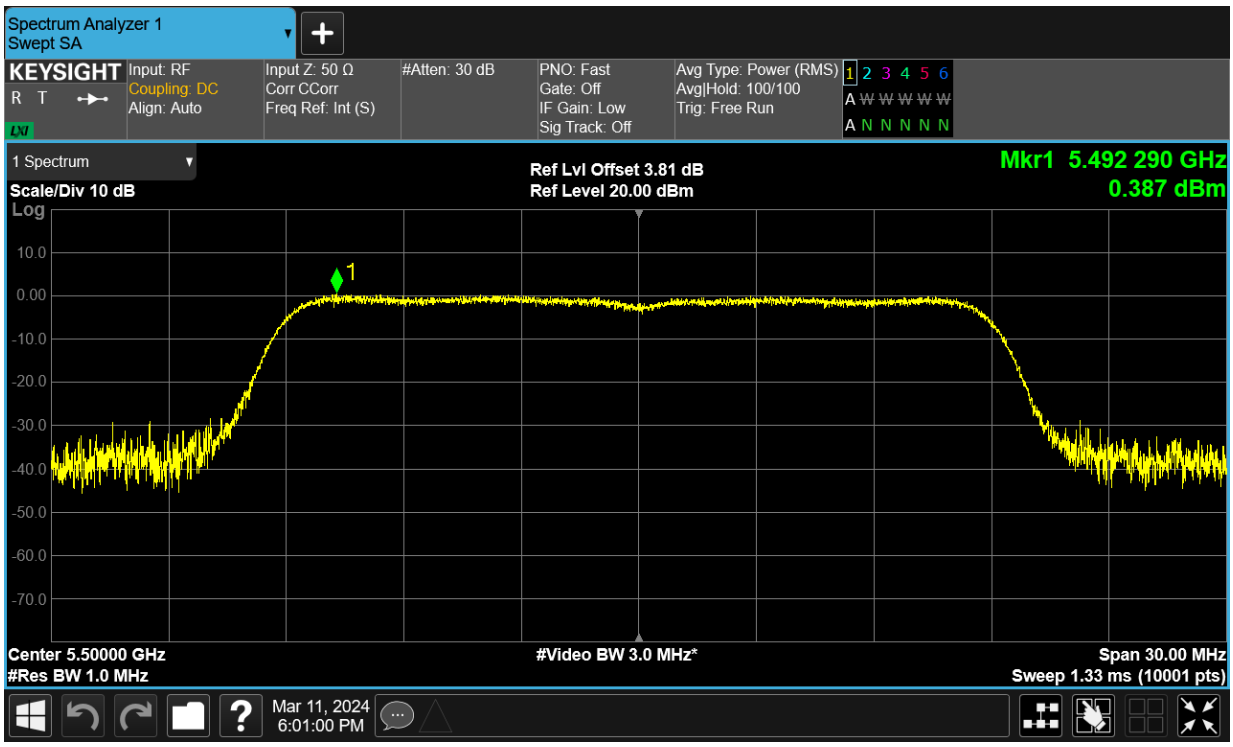
PSD NVNT a 5600MHz Ant4



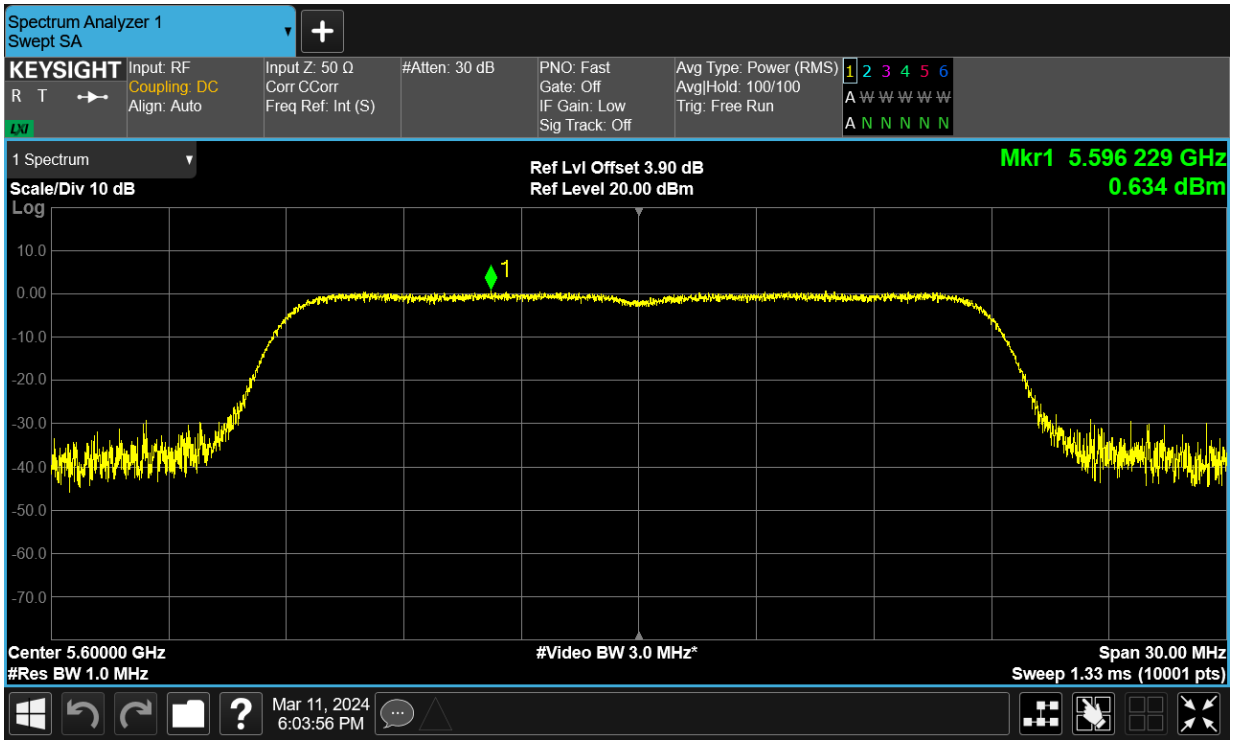
PSD NVNT a 5700MHz Ant4



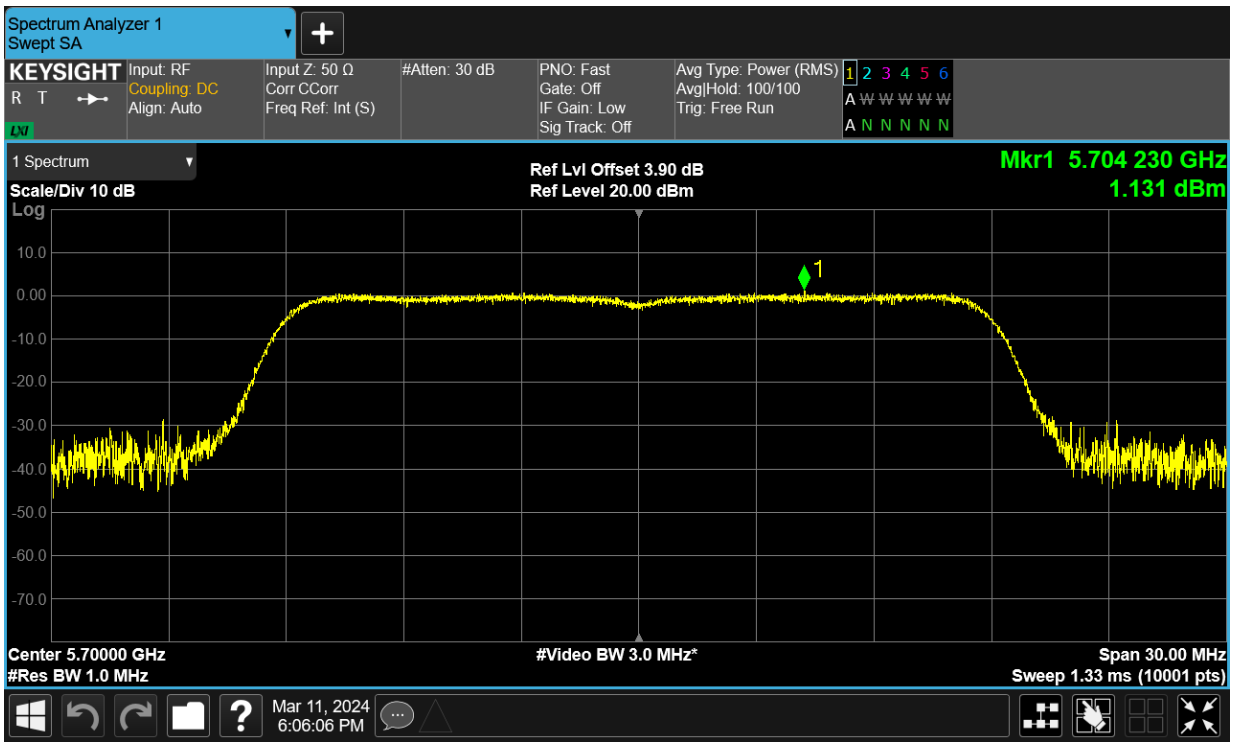
PSD NVNT ac20 5500MHz Ant4



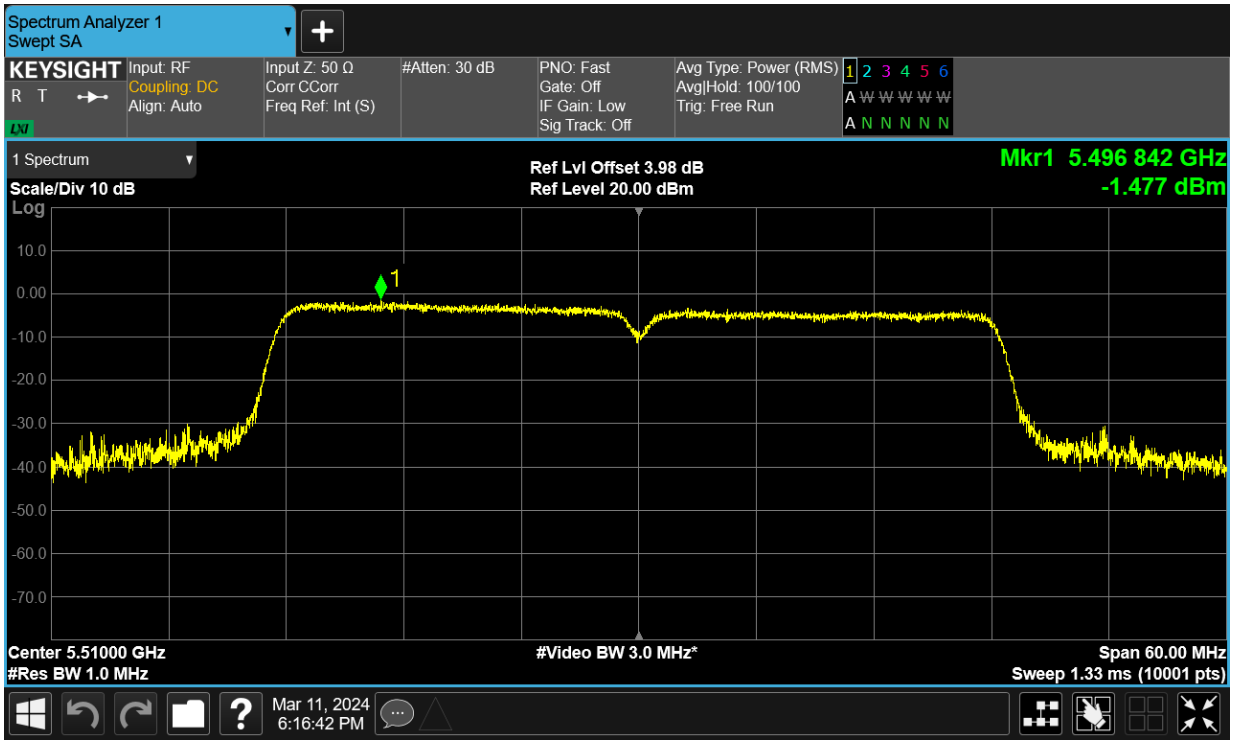
PSD NVNT ac20 5600MHz Ant4



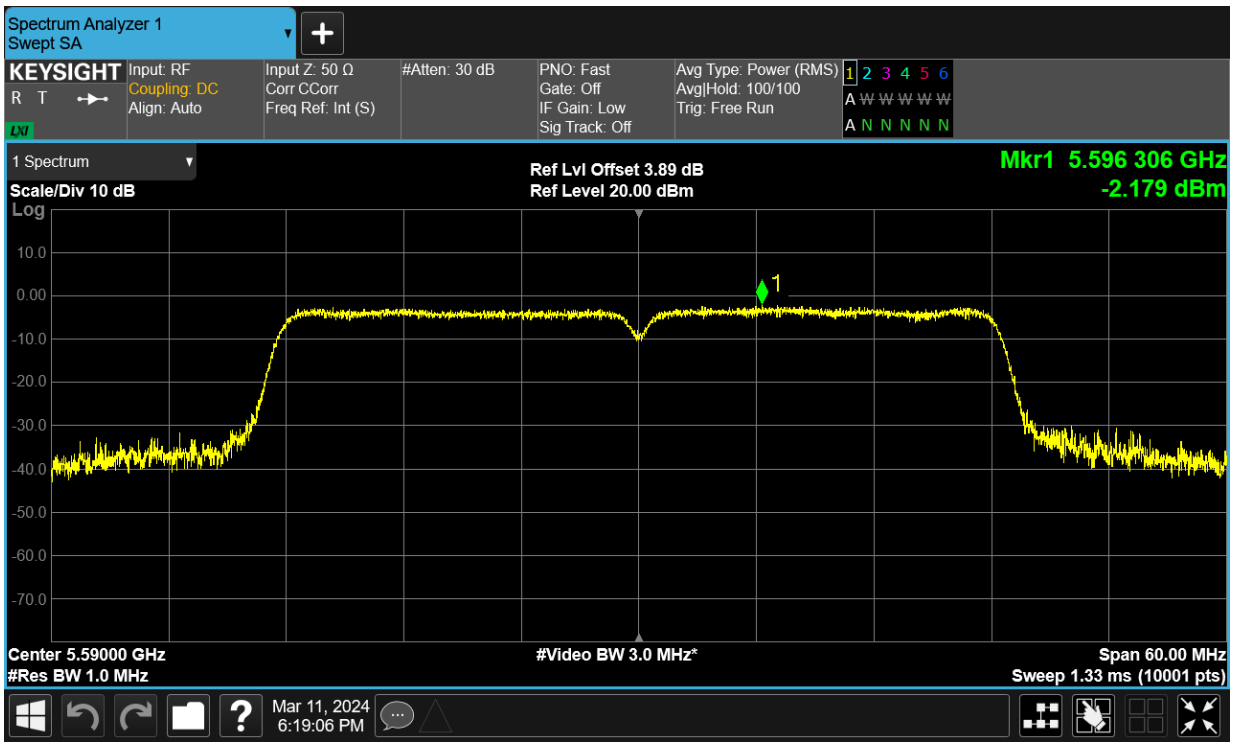
PSD NVNT ac20 5700MHz Ant4



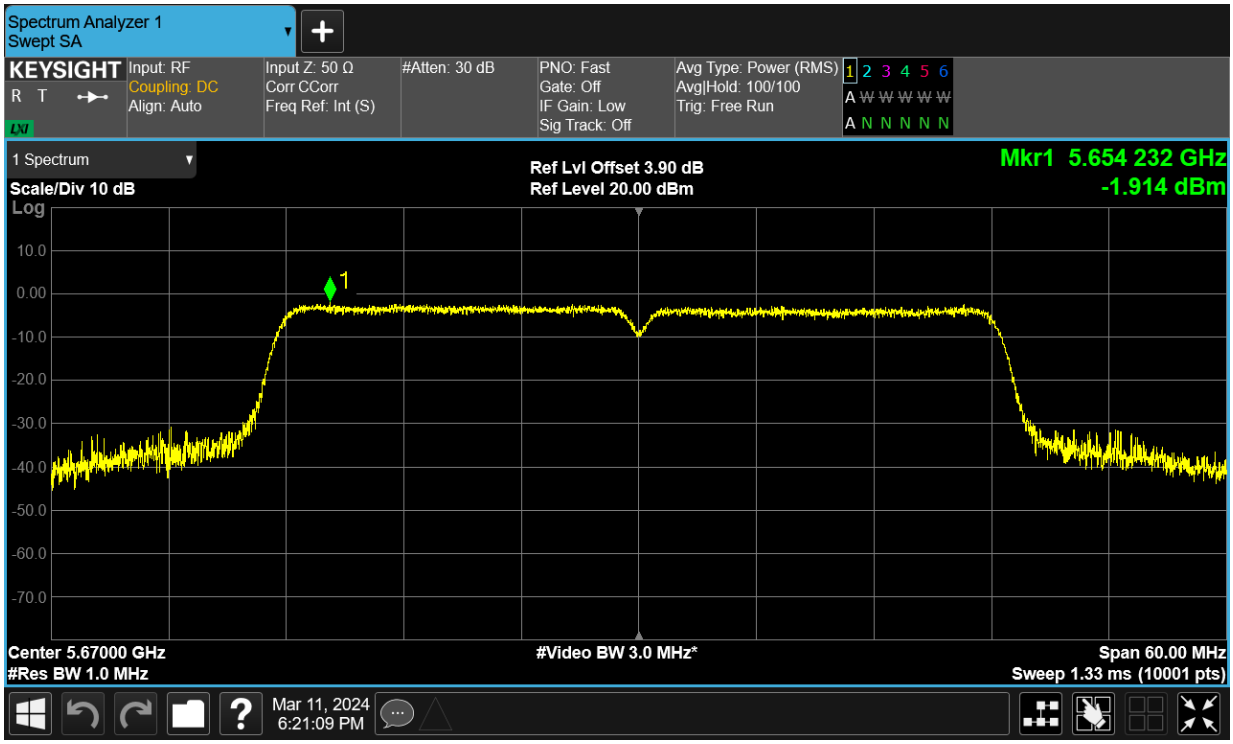
PSD NVNT ac40 5510MHz Ant4



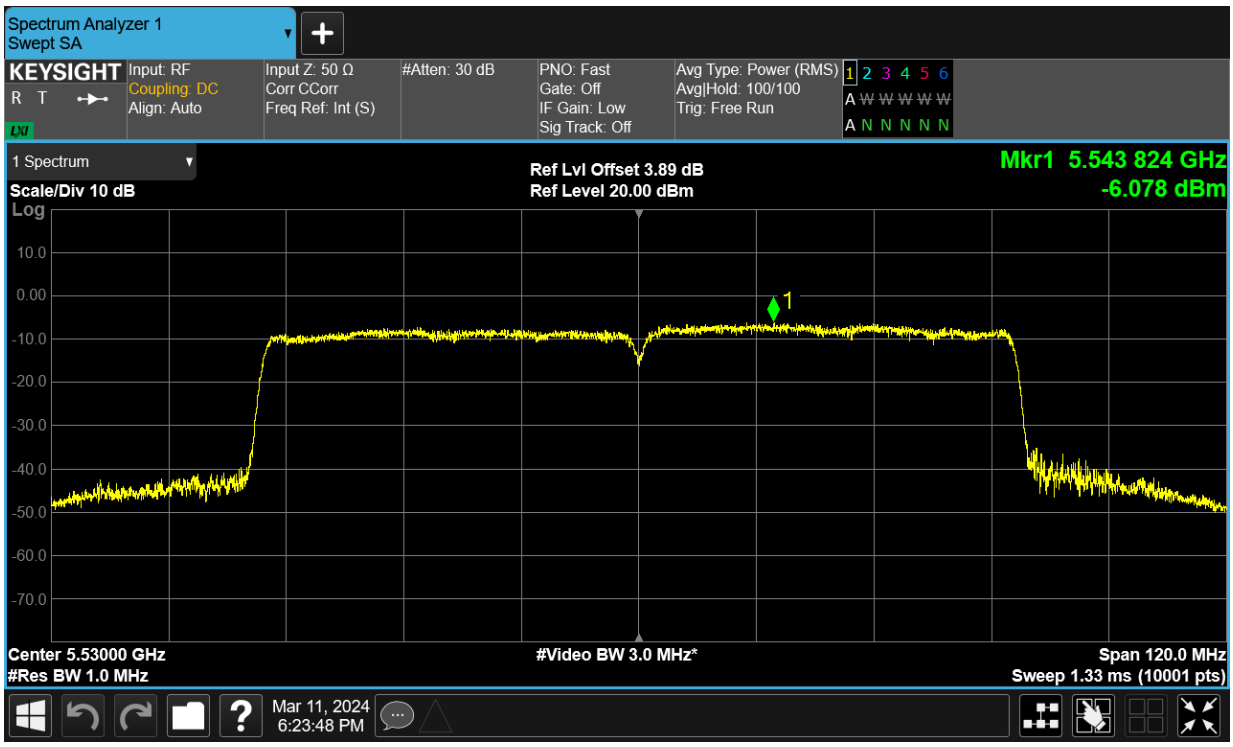
PSD NVNT ac40 5590MHz Ant4



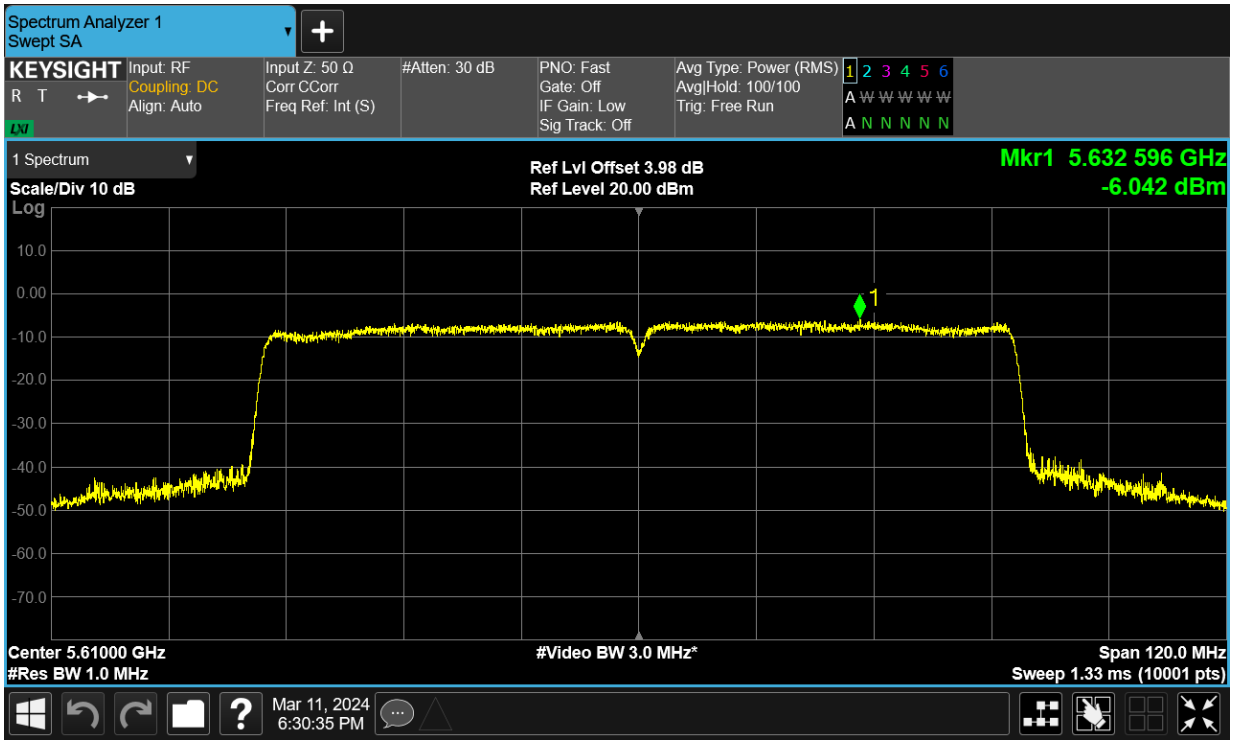
PSD NVNT ac40 5670MHz Ant4



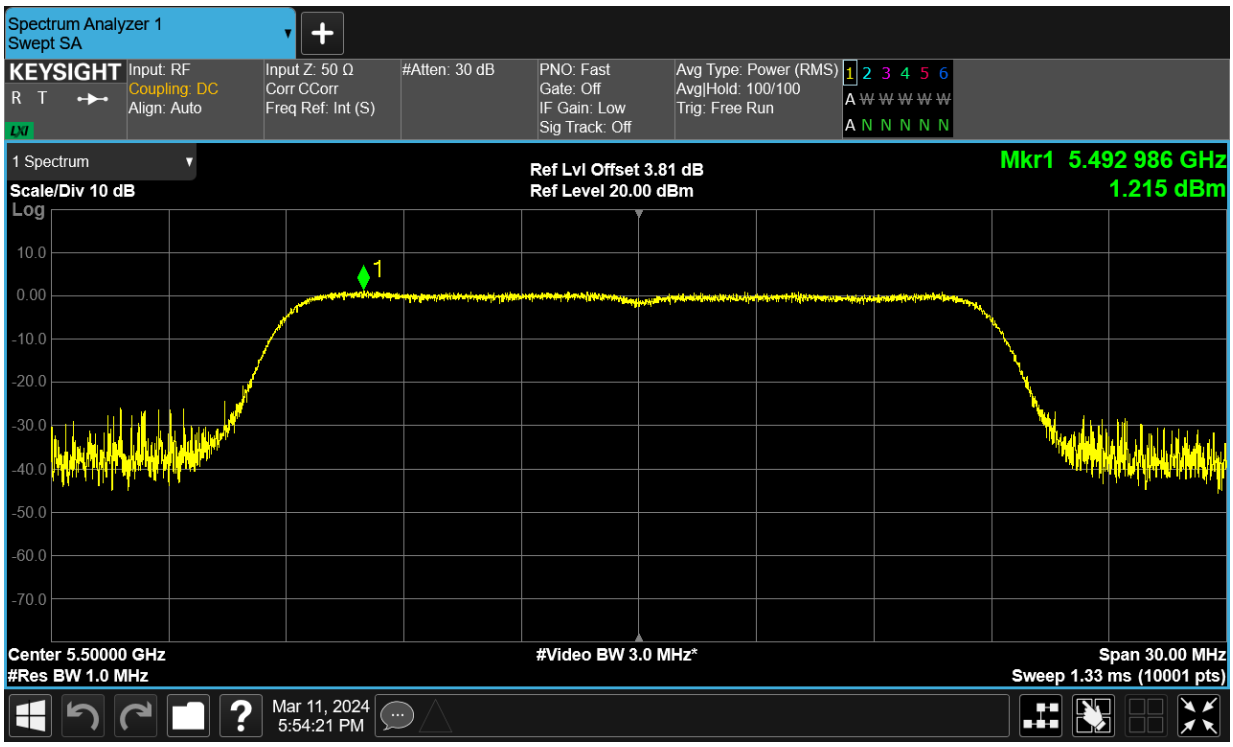
PSD NVNT ac80 5530MHz Ant4



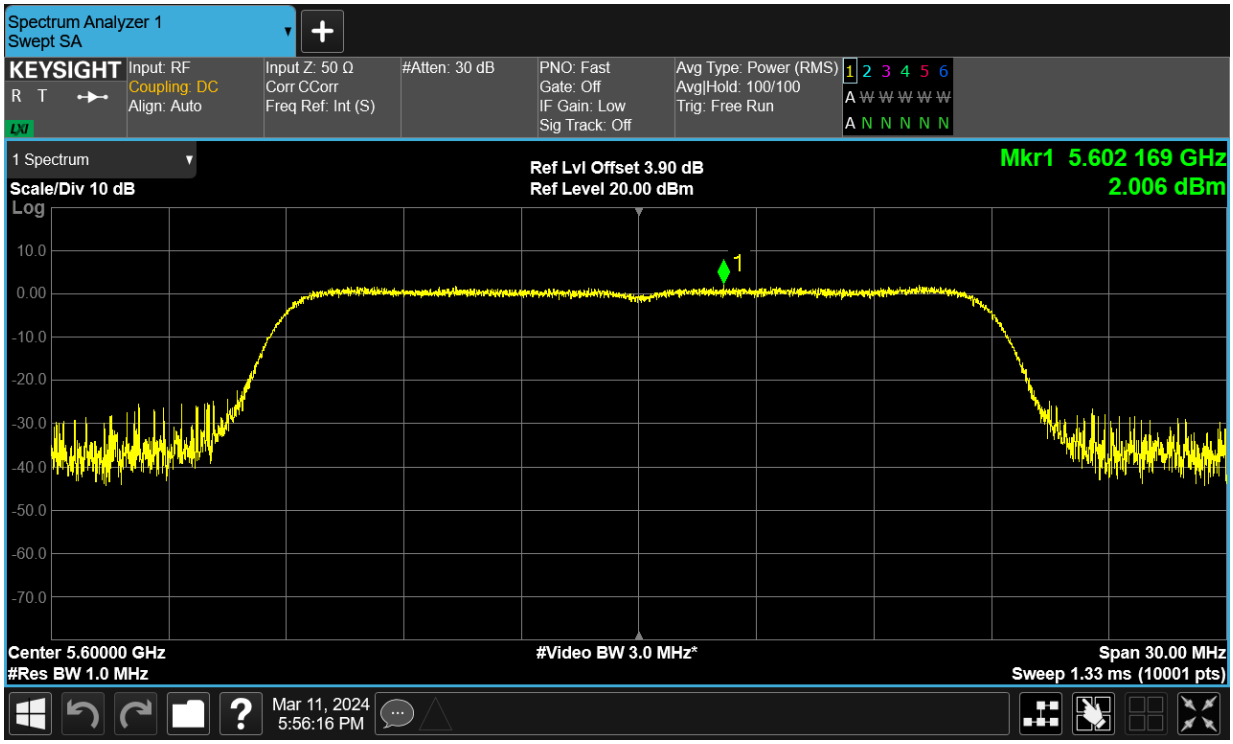
PSD NVNT ac80 5610MHz Ant4



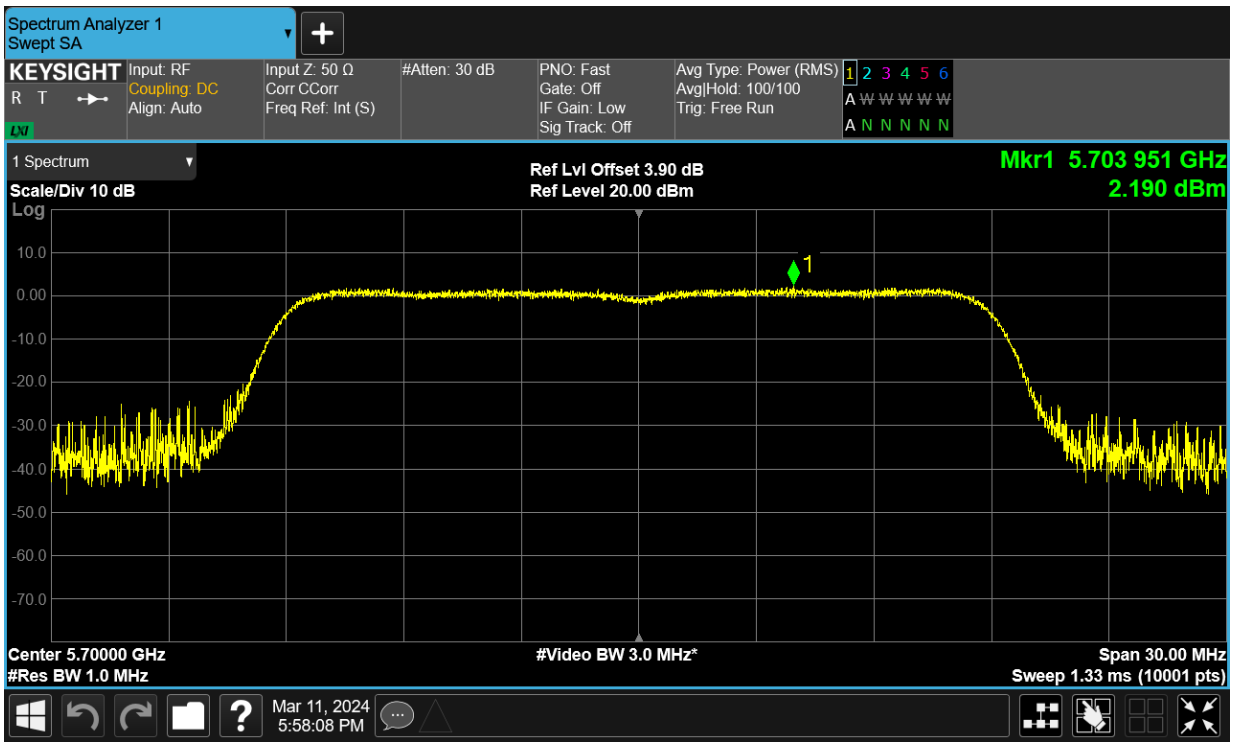
PSD NVNT n20 5500MHz Ant4



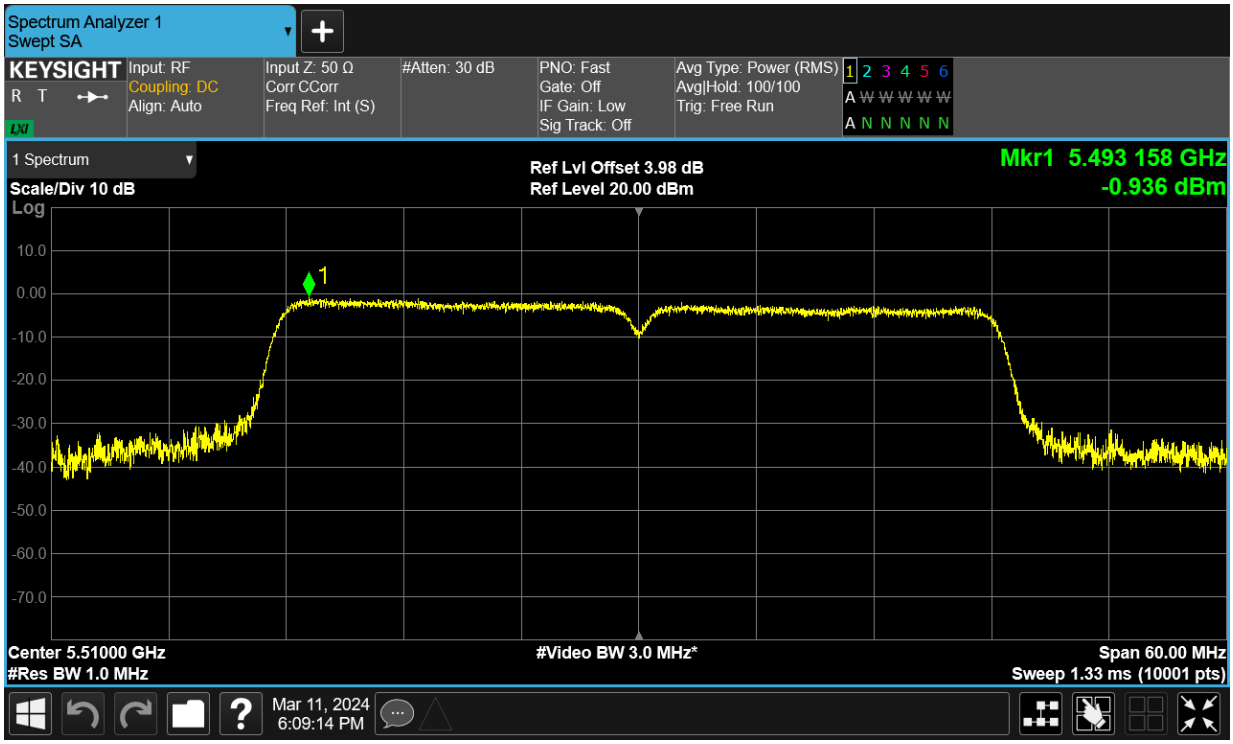
PSD NVNT n20 5600MHz Ant4



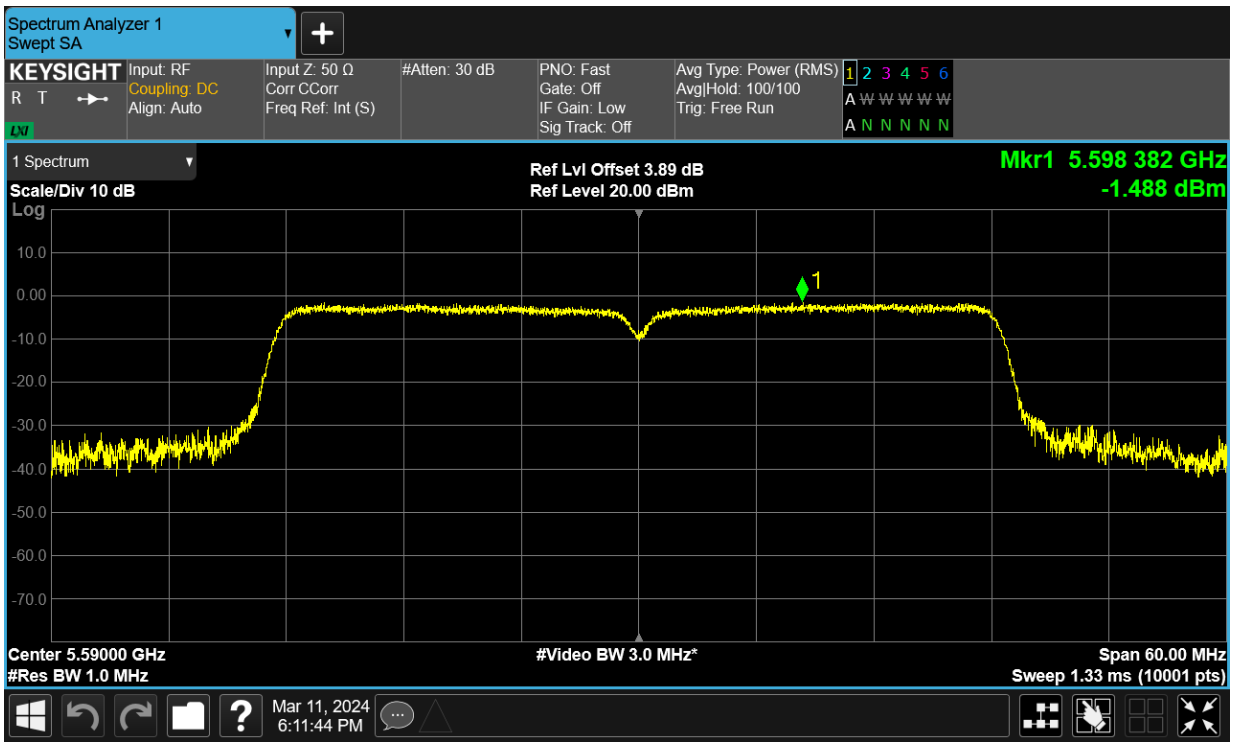
PSD NVNT n20 5700MHz Ant4



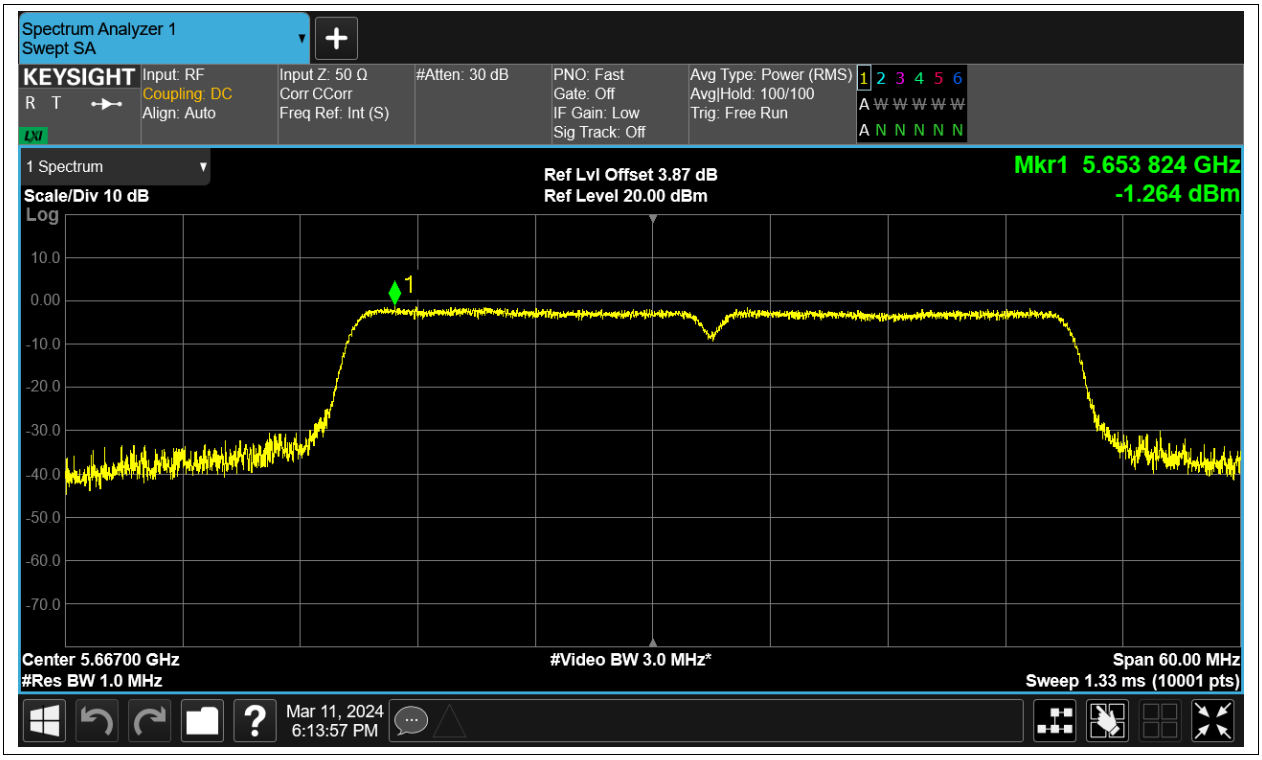
PSD NVNT n40 5510MHz Ant4



PSD NVNT n40 5590MHz Ant4



PSD NVNT n40 5667MHz Ant4


Spectrum Analyzer 1
Swept SA
KEYSIGHT
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corr CCorr
Freq Ref: Int (S)
#Atten: 30 dB
PNO: Fast
Gate: Off
IF Gain: Low
Sig Track: Off
Avg Type: Power (RMS)
Avg|Hold: 100/100
Trig: Free Run
1 Spectrum
Scale/Div 10 dB
Log
Ref Lvl Offset 3.87 dB
Ref Level 20.00 dBm
Mkr1 5.653 824 GHz
-1.264 dBm
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
Center 5.66700 GHz
#Res BW 1.0 MHz
#Video BW 3.0 MHz*
Span 60.00 MHz
Sweep 1.33 ms (10001 pts)
Mar 11, 2024
6:13:57 PM